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AUTHOR Hazleton, Jared E.; And Others
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ABSTRACT

This study describes the major forms of year-round education, evaluates their potential costs and educational benefits (including effects on student academic achievement, learning retention, socialization, and employability), and assesses such programs' feasibility as to legal requirements and effects on school personnel and the larger community. Year-round education (YRE) or year-round schools or schooling (YRS) often connote two different alternations to the traditional school calendar: (1) increasing classroom time by extending the school year or the school day; and (2) rearranging the traditional 180-day school calendar to provide more frequent and shorter vacation periods. Research indicates that substantial increases of classroom time would result in some improvements in academic achievement, but would be very costly. Single-track YRE programs (all students in school or vacationing at the same time) now account for 46 percent of all YRE programs. The normal 3-month summer break may hinder learning retention, particularly for disadvantaged youth. Multitrack YRE programs offer potential capital savings due to more efficient facilities use; single-track YRE programs can be more expensive than 9-month calendar schools. A telephone survey of 1,003 Texans indicates weak commitment to YRE, but favorable disposition toward trying it. Another informal survey showed that 41 Texas school districts were operating some form of YRE (mostly single-track programs) and that teacher response is positive. Recommendations for further implementation of year-round programs in Texas are provided. Appendices contain descriptions of YRE plans, informal survey results, and Texas YRE districts information. (Contains 56 references.) (MLH)

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COST EFFECTIVENESS OF ALTERNATIVE YEAR SCHOOLING

FINAL REPORT

August 1992

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COST EFFECTIVENESS OF ALTERNATIVE YEAR SCHOOLING

FINAL REPORT

August 1992

Dr. Jared E. Hazleton, Principal Investigator
Dr. Craig Blakely, Co-Principal Investigator
Dr. Jon Denton, Co-Principal Investigator

Prepared for:

Educational Economic Policy Center
State of Texas
The University of Texas at Austin
Austin, Texas 78712

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EXECUTIVE SUMMARY

The purpose of this study is to describe the major forms of year-round education, evaluate their potential costs and educational benefits (including impacts on student academic achievement, learning retention, socialization, and employability), and assess the feasibility of such programs in terms of legal requirements, impact on school personnel, and impact on the community at large. Particular attention is given to the embryonic efforts to implement year-round education programs in Texas.

Year-Round Education: An Overview

Year-round education often is used to describe two different alterations to the traditional school calendar: (1) increasing time in the classroom by extending the school year or the school day; and (2) rearranging the traditional 180-day school calendar to provide for more frequent and shorter vacation periods. To avoid confusion, ***in this report the terms year-round education (YRE) and year-round schools or schooling (YRS) are used interchangeably*** to refer to programs which alter the length and frequency of vacation periods without changing the total number of days in school.

Increasing Time in the Classroom

Students in the United States attend school for an average of 180 days, compared to 200 to 235 days for students in other developed nations. Students in the U.S. also score lower on standardized achievement tests than their peers in other countries.

Research suggests time spent in the classroom is positively related to student performance. Thus, many educators and citizens are calling for increasing the time U.S. children spend in the classroom.

Findings

- Research indicates that in order to achieve significant improvement in student achievement, a minimum of 35 days of additional time in the classroom may be required.

- Many educators believe that student learning depends not only on time in the classroom but on how that time is used.

- The typical school year of 1,080 hours may result in as few as 364 hours of time-on-task.

- Most research assumes that costs will rise proportionately as time in the classroom is increased.

Conclusion

- Substantial increases in time in the classroom would result in some improvement in student academic achievement.

- The cost of significantly increasing time in the classroom would be quite high, on the order of $1 billion a day nationally.

- The relevant issue for policy makers is whether extending time in the classroom is a more ***cost effective*** way of improving student achievement than an equivalent expenditure for other alternatives which could attain the same result.

Year-Round Schooling

Year-round schools seek to provide a more continuous teaching/learning pattern for students. Under YRS, the school calendar is changed by altering the frequency and length of vacation breaks, commonly termed ***intersessions***. Thus, the conventional nine-months of school and three-months of summer vacation are distributed across the year in smaller increments. YRE schools may be organized either as single-track or multitrack programs. Under single-track programs, all students are in school or on vacation at the same time. In multitrack programs, students are divided into equal groups, with the terms for each group being staggered so that at any given time, some students are in school and some are on vacation.

In the U.S., enthusiasm for YRE has waxed and waned as pressures on schools have changed. At the end of World War II virtually all U.S. schools were operating on a 180-day calendar with a three-month summer vacation. In response to the pressures of the baby boom, in the 1960s and 1970s many schools began operating multitrack YRE programs in order to relieve the fiscal pressures of overcrowding. By 1991, there were an estimated 1,668 schools in 23 states engaged in some form of YRE, with the number of such schools having grown 83 percent between 1990-91 and 1991-92.

Findings

- Recent increases in YRE programs have been due to dramatic increase in the number of single-track programs, which now account for 46 percent of all YRE programs, compared to only 25 percent in the 1990-91 school year.

- A number of studies suggest that the three-month summer break results in a loss of learning retention for disadvantaged students. There is less unanimity, however, regarding whether advantaged students suffer a learning retention loss over the summer vacation.

- Two studies attempting to compare learning retention under YRE programs vis-a-vis traditional nine-month calendar programs produced conflicting results and had methodological flaws.

- Analyses of student achievement in multitrack YRE programs find, with one notable exception, that student achievement is at least equal to that attained in traditional calendar programs.

- Although limited to a single study, research suggests that student achievement under single-track YRE programs is equal to or slightly better than under the conventional nine-month calendar.

- Students, parents, teachers, and administrators involved in YRE programs tend to view them favorably, citing greater learning retention, less teacher "burn out," improved student attendance, and job opportunities.

- Community support for YRE programs after implementation generally is good, with many citing reduced crime and vandalism, and improved vacation opportunities for families.

- Multitrack YRE programs reduce the annual per capita cost of education, with ninety percent of the savings coming in the form of reduced capital costs due to more intensive utilization of existing schools. The extent of the cost-savings depends on the magnitude of the increase in capacity. California has enacted an incentive program to share some of the cost savings with the affected districts.

- There are no cost savings with single-track YRE programs, since the capacity of the school is unchanged. Funds previously allocated to summer school generally are used to support the intersessions, although additional funding may be needed.

Conclusions

- There is a considerable body of opinion and some research evidence that the three-month summer break results in a loss of learning retention, particularly for disadvantaged youth. However, as of yet there is no confirmation from empirical research that student learning retention increases under YRE programs.

- Evaluations of academic achievement under various forms of YRE provide an insufficient foundation for judging the desirability of such programs. Not only have relatively few studies been made, but their research designs have often been flawed.

- There is a need for research which would follow closely a common group of students over several years. Achievement results under YRE programs should be compared with those under traditional nine-month calendar programs, in the same school if possible. Care should be taken to ensure that there are no major differences in curriculum, in the make-up of the student body, or in other factors that might influence achievement.

- With proper implementation, YRE programs likely will be accepted by students, teachers, administrators, and their community.

- Multitrack YRE programs offer potential capital savings due to more efficient use of facilities. Single-track YRE programs are likely to cost as much or more than schools operating under the traditional nine-month calendar.

- If a state bears all or a portion of school facilities construction costs, it would be desirable to provide an incentive for districts to adopt a multitrack YRE program by sharing some of the cost savings with the affected districts.

Attitudes in Texas Towards YRE

To determine public attitudes towards YRE, a telephone survey of 1,003 individuals in Texas over the age of 17 was conducted as part of the ***Texas Poll***. Respondents were asked to evaluate commonly cited advantages and disadvantages of YRE and whether and they would support its adoption.

Findings

- More than two-thirds of the respondents thought providing child care and lowering its cost were important benefits of YRE. Members of racial minorities were significantly more likely than Anglos to consider child care and its cost important benefits of YRE.

- Eight out of ten respondents believed the efficient use of school buildings to be an important advantage of YRE.

- Eight out of ten respondents believed lowering juvenile crime rates in the summer months was an important advantage of YRE.

- Nearly eight out of ten respondents deemed improved student learning and retention due to shorter school breaks to be an important advantage of YRE.

- Respondent views were nearly evenly divided when asked if providing child care was a disadvantage of YRE. Older respondents and members of racial minorities were more likely to believe child care was a disadvantage while respondents with more years of schooling were less likely to see child care as a problem.

- Over two-thirds of those polled felt that vacation scheduling was an important problem under YRE, with older respondents more likely to see this as a disadvantage and respondents with more schooling likely to rate vacation scheduling as no disadvantage.

- Six out of ten respondents considered interference with students' participation in summer activities as a disadvantage of YRE. This view was more prominent among members of racial minorities.

- Six out of ten respondents agreed that YRE was desirable, with two out of ten strongly agreeing. Members of racial minorities and respondents with more years of schooling were more likely to express approval for YRE.

Conclusions

- While commitment to YRE is fairly weak, the poll data suggest most Texans are favorably disposed towards giving YRE a try.

- The principal arguments leading to favorable views of YRE are using school buildings

more efficiently and improving learning retention. Increasing the availability and reducing the cost of child care and reducing summer juvenile crime are particularly attractive arguments in favor of YRE for members of minority groups.

- Given the persistent opposition to YRE by a significant but relatively small (20% or so) minority of respondents, success in implementing such programs will depend heavily on making a concerted effort to communicate the rationale for the change to the general public.

- The polling results suggest that widespread support will be more likely if the change to a YRE calendar is made optional, at least initially.

Year-Round Schooling in Texas

To determine the status of YRE in Texas, an informal telephone survey and questionnaire follow-up was made of districts identified by the Texas Education Agency and the Texas Chapter of the National Association for Year-Round Education.

Findings

- In the 1992-93 school year, forty-one Texas school districts are operating some form of YRE, only three of which are multitrack programs.

- Twenty-two of the twenty-six districts operating YRE programs in 1991-92 are continuing those programs.

- The 158 participating YRE schools enroll approximately 54,600 students, mostly at the elementary level.

- The response from teachers operating under a YRE calendar is reported to be overwhelmingly positive.

- Most districts report that by making concerted efforts to inform parents and the media about their YRE plans and by making the YRE program optional, they had gained strong community support. There were reports, however, of some organized opposition from summer camp operators.

- Districts report that the primary motivation for moving to YRE is to improve student academic performance, particularly for disadvantaged youth.

- Almost all districts contacted expressed an interest in receiving assistance in evaluating their YRE programs.

Conclusions:

- YRE is growing in Texas, as districts seek ways to improve academic performance and meet the special needs of minority populations.

- ❖ YRE programs will receive broad support from students, teachers, parents and others provided districts make concerted efforts to inform the community and make the program voluntary in its initial stages.

Recommendations

On the basis of this research, four recommendations are made.

1. It is recommended that Districts planning to implement YRE make a concerted effort to inform their community about the nature of the program and its intended impacts and make the program optional in its initial stages.

2. It is recommended that the Texas Legislature consider rewarding districts that adopt multitrack YRE programs by sharing with them some of the cost-savings.

3. It is recommended that the Educational Economic Policy Center sponsor an experimental study on the impact of alternative school year scheduling in Texas public schools on learning retention and academic achievement.

4. It is recommended that the Texas Education Agency collect and analyze information on intersession programs being used in YRE single-track programs in Texas and disseminate the results to all school districts in the state.

OUTLINE OF THE STUDY

ACKNOWLEDGMENTS

EXECUTIVE SUMMARY

I. Introduction

II. Expansion of Time in School

III. Year-Round Schools

IV. Public Attitudes in Texas Towards Year-Round Education

V. The Status of Year-Round Education in Texas

VI. Conclusion and Recommendations

Appendices

A. Description of YRE Plans

B. Results of an Informal Survey of Texas YRE Districts

C. RFP for a Study of Learning Retention

Volume II. Attitudes Towards Year-Round Schooling: Texas Poll, Winter 1992

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This study benefitted from the insight of a number of educators who have been involved with year-round education both at the state and national levels. Particular thanks go to Norman R. Brekke, Superintendent of the Oxnard California School District, for sharing his extensive experiences with YRE and supplying copies of numerous articles and reports on the implementation of YRE in California. Dr. Charles Balinger, Executive Director of the National Association for Year-Round Education (NAYRE) and Dr. R.S. "Skip" Archibald, III, Superintendent of the Marion County School System in Ocala, Florida and NAYRE 1992 President, also were very helpful in providing information for this study. The enthusiastic members of the Texas Chapter of NAYRE provided many first-hand accounts of implementation of year-round schools in the Lone Star State.

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I. INTRODUCTION

The shortest unit of time is 1^{-43} second, the life span of the briefest elementary particle, the smallest known sub-atomic matter in existence. At the other end of the spectrum, the longest known unit of time is the nearly twenty billion years since the Big Bang created the universe. Neither of these time dimensions would have had much meaning a century ago. Today they help define the span of modern science and technology running the gamut from the microcosm to the macrocosm.

> In his book Future Perfect, Stanley M. Davis (1987) observes: "...time is a way to measure, and hence define, existence. And these definitions are culturally imposed.
>
> When time becomes viewed as an intrinsic dimension of something, it gets treated more as a resource to be drawn upon and less as a constraint to be gotten around. Einstein added time to scientific models of the universe; then electronics used time resourcefully in technological models; strategy added it next to business models; and now we should make time an intrinsic dimension of our organizational models."

In the public schools, traditionally time has been seen more or less as a constant. The September-June, roughly 180-day, five to seven hour per day school calendar had its roots in the prevailing agricultural economy of the late 19th century. Many are beginning to ask what relevance that calendar has to modern day society. Charles Ballinger (1988) notes, "It was not designed to enhance instruction then, and it does not do so now."

In an effort to utilize time more effectively, a growing number of school districts across the nation are adopting some form of year-round education (YRE). YRE is a term often used to describe two very different types of alteration to the traditional school calendar, one calling for increased instructional time, the other for a rearrangement of that time.

Some refer to YRE as expanding the school year beyond the customary 180 days, in order to improve student achievement through increasing "opportunities to learn" and "instructional time". Most proposals for achieving this objective call for adding twenty or more days to the school calendar. Of course, increased instructional time could also be achieved by other means. For example, adding an additional instructional period in secondary schools (i.e., moving from six to seven periods a day), provides the equivalent of one additional day of schooling in 1.2 weeks. Over the customary 180 day school year, this arrangement would be equivalent to adding 30 school days to the calendar. Other options might include holding classes on Saturday or establishing individualized student programs.

More commonly, however, YRE is used to describe a rearrangement of the traditional 180-day school calendar into instructional blocks and vacation periods that are evenly distributed

across a 12-month calendar year. A year-round school (YRS) is operated on either a "single-track" or a "multitrack" basis. Under a single-track system the entire school population (i.e., students and teachers) follows the same calendar with the same vacation periods. In a multitrack system, students and their teachers are grouped into different tracks, with staggered instructional blocks and vacation periods.

The purpose of this study is to describe the major forms of year-round education, evaluate their potential costs and educational benefits, (including impacts on student academic achievement, learning retention, socialization, and employability), and assess the feasibility of such programs in terms of legal requirements, impact on school personnel, and impact on the community at large. Particular attention is given to the embryonic efforts to implement year-round education programs in Texas.

The terms year-round education (YRE) and year-round schools or schooling (YRS) are used interchangeably in the literature. To avoid confusion, in this report these terms will be used only to refer to programs which alter the length or frequency of vacation periods without changing the total number of days in school.

The report is divided as follows:

- Section Two discusses proposals for increasing time in the classroom and assesses their impact on academic achievement and school budgets.
- Section Three describes plans for rearranging the school calendar to create year-round schools and evaluates their academic, fiscal, and other impacts.
- Section Four describes the results of a survey of Texans regarding their attitudes towards year-round schools.
- Section Five summarizes the status of year-round schools in Texas.
- Section Six provides a brief summary of the principal conclusions of this research study and presents recommendations for continued research. Additional information on YRE is contained in the Appendices.

II. EXPANSION OF TIME IN SCHOOL

Proposals to expand time in school generally are based on three assumptions: (1) students in the United States spend less time in school than students in other countries; (2) students in the United States lag behind their peers in other developed nations in academic achievement; and (3) if students in the United States were to spend more time in school their academic performance would improve and the U.S. competitive position in the world economy would improve. For example, A Nation at Risk (1983) observed:

> "In England and other industrialized countries, it is not unusual for academic high school students to spend 8 hours a day at school 220 days a year. In the United States, by contrast, the typical school day lasts 6 hours and the school year is 180 days."

Based on this presumption, the Commission recommended "more effective use of the existing school day, a longer school day, or a lengthened school year." Similar conclusions were reached by the Task Force on Education for Economic Growth (1983), which urged all states to "...increase both the duration and intensity of academic learning time."

Table 1 indicates that students in the United States, on average, do attend school less days than their peers in other developed nations. Making international comparisons based on average days in school, however, is not without its difficulties.

Table 1. Average Number of Shool Days per Year

Japan	243	New Zealand	190
West Germany	226-240	British Columbia	185
South Korea	220	France	185
Israel	216	Ontario	185
Luxembourg	216	Ireland	184
Soviet Union	211	New Brunswick	182
Netherlands	200	Quebec	180
Scotland	200	Spain	180
Hong Kong	195	United States	180
England/Wales	192	French Belgium	175
Switzerland	191	Flemish Belgium	160
Finland	190		

Source: Norman R. Brekke, "Year-Round Schools: An Efficient and Effective Use of Resources," School Business Affairs, May 1992, p. 29.

One principal drawback of the existing data is that it may not accurately reflect actual instruction time in each country. For example, Joannue Yatvin (1984), writing in Principal, observes:

> "Having lived in Belgium and Israel, where my children attended public schools, and having visited more than 50 schools in those two countries plus Germany,

Great Britain, and the Netherlands, I doubt the accuracy of this perception [that students go to school 200-220 days per year, seven-hours a day] — at least about European schools. The situation there is not what it appears to outsiders.

Yes, children go to school on Saturday mornings, but they do not go on Wednesday afternoons. Yes, the school day lasts to 3:30 or 4:00 p.m., but there is likely to be a 90-minute lunch period and 10- to 20-minute recreational breaks between classes. Because there are few organized sports connected with schools, times for informal games and recreation are also scheduled into the school day, in addition to regular physical education classes.

In Germany the school day ends at 1 p.m. (although children do have a lot of homework to keep them busy in the afternoons) so that the family can be together at its midday meal. Yes, the school year does not end until July, but there are long winter and spring vacations and also a week to ten days off in February. In addition, there are many national and religious holidays on which schools are closed. All things considered, there can't be more than 190 days that school is actually in session."

In spite of these difficulties, however, it is generally accepted that students in Europe and especially in Japan spend more time in school than do their counterparts in the United States.

Table 2 indicates that states vary little in their requirements for school attendance. At the beginning of the 1989-1990 school year, the number of days of school required ranged from 182 days in Ohio to 170 days in Minnesota. By far the most common requirement is for 180 days of school with the potential number of allowable days for non-teaching activities ranging from a few hours up to 10 days [Pipho, 1990a].

Table 2. Length of the School Year, 1989-1990
(Minimum Number of Pupil/Teacher Contact Days)

State	Contact Days	State	Contact Days	State	Contact Days
Alabama	175	Louisiana	175-180	Oklahoma	180
Alaska	180	Maine	180	Oregon	*
Arizona	175	Maryland	180	Pennsylvania	180
Arkansas	180	Massachusetts	180	Puerto Rico	180
California	175-180	Michigan	180	Rhode Island	180
Colorado	176	Minnesota	170	South Carolina	180
Conneticut	180	Mississippi	180	South Dakota	175
Delaware	180	Missouri	174	Tennessee	180
District of Columbia	180	Montana	180	Texas	175
Florida	180	Nebraska	180	Utah	180
Hawaii	175-180	Nevada	180	Vermont	180
Idaho	180	New Hampshire	180	Virginia	180
Illinois	176	New Jersey	180	Washington	180
Indiana	180	New Mexico	180	West Virginia	180
Iowa	180	New York	180	Wisconsin	180
Kansas	180	North Carolina	180	Wyoming	175
Kentucky	175	Ohio	182		

Note: * To Allow for more flexibility in the districts, the state requires 450 hours for kindergarten, 810 for 1-3, 900 for 4-8, and 990 for 9-12.

Source: Chris Pipho, Education Commission for the States, Forum, 1990

Studies of student achievement in 22 countries in the early 1970s by the International Association for the Evaluation of Educational Achievement (IEA) also found that other industrialized nations rank above the United States in average achievement [Husen, 1974].

Of course, unlike other industrial countries, the United States attempts to provide a secondary education to a large proportion of its school-age population. "The significant fact that seems to have been overlooked is that these IEA studies also found that top-quality U.S. students ranked favorably with comparable cohorts in the most selective Western European school systems [Blai, 1986]."

Finally, the IEA research indicated that the more time spent studying a subject (in hours per week or total years), the higher the scores. While this finding should come as no surprise, it needs to be carefully interpreted. Donald Holsinger (1982) notes that "among the more advanced countries...there are no marked deviations, high or low, in the pattern of achievement test scores." He concludes that in spite of the substantial differences in the length of the school day and year among the more advanced countries, their school systems "are all more or less equally effective."

Impacts of Expanding Time in School

Conventional thought based on process-product classroom research from the past two decades does suggest, however, that academic achievement can be improved by increasing "time given to instruction" and "opportunity to learn" [Borg, 1980; Fisher, 1980; and Karweit, 1983]. Based on this research, proposals for educational reform commonly have included calls for increasing the school year by raising the required days of teaching by 20 days, thus establishing a 200-day school year.

In 1990, some 15 states were reported to have initiated proposals to lengthen the school year. Brekke (1992) reports proponents of a lengthened school year include Lee Iacocca; the Maryland State Board of Education; James W. Dyke, Jr., Virginia's Secretary of Education; Bob Ethridge, State Superintendent of Education in North Carolina; Wermer Rogers, State Education Superintendent in Georgia; Ernest Boyer of the Carnegie Foundation for the Advancement of Teaching; Tim Kimbrough, Superintendent of Chicago Public Schools; The Education Commission of the States; and The National Governors' Association.

Not all research, however, supports the view that simply expanding classroom time will improve student achievement. Stallings (1980), after reviewing a number of studies that found the length of the school day or class period was not related to student achievement, concluded "...student learning depends on how the available time is used, not just the amount of time available." Richard Rossmiller (1983), chairman of the Department of Educational Administration at the University of Wisconsin, apparently agrees: "Before we start extending the school day or year, we ought to make better use of the time we have."

Dr. James C. Bradford, Jr. (1992), Superintendent Buena Vista (Virginia) City Schools, makes a similar observation:

> "The problem with American education could be that students spend approximately nine percent of their first eighteen years in school. A twenty-two state survey conducted by Educational Services Institute in Cincinnati, Ohio revealed that the American school children are engaged in learning activities about three hours and twenty-two minutes during each school day (1990). The total instructional day for the nation's children is usually about five and one-half hours excluding riding the bus, study hall, pep rallies, homeroom, and other activities that interrupt the learning schedule. The research shows 'a link between the time a student spends learning and the amount of learning that occurs.'"

Rossmiller (1983) showed how a typical school year of 1,080 hours may result in as few as 364 hours of time-on task.

If it is assumed that additional time in school would improve academic performance, how much additional time would be required? Karweit (1982) reported from her review of learner time-on-task research that while more study time produces greater achievement, the amount of additional study time required to produce significant increases in student learning would be on the order of an additional hour per day. Given an estimated five hours per school day actually devoted to instruction, ***an additional 35 school days would be needed to produce a noticeable change in student learning***.

When evaluating a proposal to extend the school year, the most relevant research, of course, would be comparisons of achievement based on school years of different length. Unfortunately, there is what Caldwell, Huitt, and Graeber (1982) call "a lack of significant and consistent findings" from such studies, probably in part because of the limited variability in length of school year nationwide, with a difference of only about ten days between the shortest and longest average school year among the states

Nor do the results of most "Extended School Year" (ESY) experimental programs conducted in the 1960s and 1970s shed much light on the situation. Although many of these programs extended the use of educational facilities to virtually year-round, in many programs an individual student did not actually attend school more days per year. Programs in which the school year was actually lengthened were often acceleration plans aimed at shortening the total number of years a student attended school (i.e., K-12 was completed in 11 or 12 years), so no increase in actual student learning time occurred over the total span of elementary and secondary schooling.

Barbara Benham Tye and Kenneth Tye, based on their own six-year research study of the characteristics of American schooling conclude, "***...the proper focus for educational improvement should be on quality rather than quantity***." They note,

> "One thing we learned from having been immersed in A Study of Schooling for the past six years is that excellence is not likely to result from simply prescribing more of what we already have in schools."

Pipho (1990b) also argues that the greatest limitation to more instructional time being provided is our inability to think of different ways to use the time more effectively. He suggests that giving parents options and creating special programs that recognize that our society views summer as a time for a different style of living could make this a unique time for learning experiences. A change of instructional pace, a rigorous academic program concentrated into a shorter time period and placed in a different setting (e.g., field work or nature camp) might enhance motivation and relevance of the learning tasks. He concludes his report with the following policy challenge: What would happen if a 20-day longer school year was mandated, but parents were given vouchers to redeem when and where they could accommodate the extra learning? Schools, other public agencies, and private firms might combine learning and day care activities to provide a real test case for the voucher concept as well as use the summer vacation time in a different and more productive manner.

In recent years, there have been a number of efforts across the nation to expand options for students during the summer vacation period. Many schools are open throughout the summer not only for summer school but for other types of programs. Academic camps, parks and recreation programs, library and museum programs are presently available and provide a wide range of organized learning experiences to youth during summers as well as throughout the year.

Unfortunately, there is a dearth of evaluative research on the academic impact of summer enrichment programs. Moreover, not all students have access to such opportunities, including those who need enrichment most.

Carter (1984) reports that disadvantaged elementary students do not receive clear benefits from attending compensatory summer school programs. But little is known about the impact of summer programs for disadvantaged middle and high school students. Sipe, Grossman, and Miller (1987) report that STEP, an intensive, experimental summer high school program combining academic learning, life skills, and employment, checked achievement losses and produced slight gains during its first two years. But Heyns (1986) cautions that without a valid expected growth curve against which to measure summer achievement, it is not clear whether the effectiveness of any summer school should be measured as "gains" or as "arrested losses" for either advantaged or disadvantaged children.

In summary, there is little evidence to suggest that marginally extending the school day or the school year, ***in and of itself***, would have a significant impact on student achievement. Research does suggest that substantial increases in classroom time (on the order to 35 days) would improve student achievement. But many educators believe that a more fruitful

approach would be to focus on using the existing school day more effectively, by expanding academic learning time or provide enhanced enrichment programs during the three-month summer break.

Cost. A study by Alan Odden of the Educational Commission of the States estimated that extending the school day to eight hours would cost the nation in excess of $20 billion annually, as would lengthening the school year from 180 to 200 days [Toch, 1983]. Dr. Charles Ballinger (1992), Executive Director of the National Association for Year-Round Education, believes that an extended school year will come, but cautions,

> "Most of the calls to lengthen the school year originate at the federal level because the national government does not have to pay the bill of extending the school year. The states do. Moving to a longer year will not be easy for the states to do in the short run...At a cost of nearly $1 billion per day for public education in the nation, it may be some time before we will see the addition of very many instructional days."

It should be noted that the implicit assumption underlying this and other estimates of the cost of increased time in school is that costs will rise more or less proportionately, i.e., the studies simply multiply the aggregate cost per day of the 180-day school year by the equivalent additional number of days of schooling. Table 3 presents one such estimate of the incremental costs of adding school days. While costs might not rise proportionately for marginal extensions of classroom time, this assumption appears realistic if substantial increases are being mandated.

Table 3. Incremental Cost of Adding School Days

Incremental Cost of Adding One Day to the School Year:	
K-12 Student Enrollment in the U.S.	40,512,243
Average Per Pupil Expenditure Per School Year	$4,941
Average Per Pupil Expenditure Per Day	$27.45
Cost of Adding One Instructional Day	$1,112,132,336

Incremental Costs of Adding Days to the School Year		
	(From 180-Day to 181-Day School Year)	(From 180-Day to 200-Day School Year)
California	$121,375,281	$2,427,505,620
Texas	$76,266,254	$1,525,325,080
Florida	$50,365,904	$1,007,318,080

Source: Brekke (1992)

Cost Effectiveness Is the Issue. If providing increased time for schooling will require proportionately greater expenditures, the relevant policy issues for states becomes one of ***cost effectiveness***. Henry M. Levin (1983a), director of the Institute for Research in Educational Finance and Governance, cautions:

> "...there is no evidence that suggests that increasing the amount of time spent in learning is a more effective way to increase achievement relative to its costs than other instructional alternatives...What is done with the time is probably more important in affecting student achievement than mechanical increases in the length of the school day or school year, or class time spent on particular subjects. Results are also likely to be highly dependent on the nature of the student population, the subject, and the organization of instruction."

Levin uses as an example the proposition that a district that extends the school year and day enough to raise costs $500 per pupil might do better to increase teacher salaries, hire remedial specialists, or obtain needed equipment such as videotapes or computers. "Simple mechanical increases in the use of time may not have a significant impact on achievement or other school output, and they are likely to be costly relative to their effectiveness [Levin, 1983b]."

Jo Ann Mazzarella (1984) provides a succinct summary of where the issue of expanding time in the classroom stands today:

> "Should kids spend more time in school? Perhaps. Spending more time in the classroom probably will result in some gains in achievement, especially for low achievers. There may be other positive social effects, too, in an era when many mothers work and supervised activities for children are needed until five p.m.
>
> Yet research suggests that achievement gains will not be dramatic and they *will* be expensive. What we gain will depend heavily on what Americans are willing to pay to produce relatively small gains in achievement scores."

Before extending time in the classroom, school districts should consider whether equal or greater gains in student achievement could be obtained by less costly alternatives. Unfortunately, there is little research which addresses this issue in operational terms.

III. YEAR-ROUND SCHOOLS

Year-round schools are not a new concept. In the United States interest and enthusiasm for YRS has waxed and waned as pressures on schools have changed.

YRE: An Idea Whose Time Has Come — And Gone — And Come Again?

Loyd (1991) provides an excellent overview of the development of year-round schools in the United States. As early as 1840, a number of urban schools operated year-round, although rural schools were open for only four to six months a year. In the last half of the 19th century, however, state governments began to impose minimum curriculum standards and regulations requiring a minimum number of hours and days for public schools. By the first quarter of this century, the public school day had become standardized with a legal minimum of approximately 180 schools days per year.

Nonetheless, a small number of cities continued to use a year-round calendar. Most of these plans were mandatory quarter systems adopted primarily to assist the language and cultural assimilation of the foreign-born immigrants, provide needed space for rapidly expanding student populations, and accelerate the movement of students through the grades to enable them to enter the workforce sooner.

By the 1930s, however, the number of year-round schools was declining, as federal programs began to offer support for school construction and a declining birthrate began to alleviate the pressures of overcrowding. By 1956, a National Education Association report was able to claim that every school system that had attempted a twelve-month school calendar had abandoned it, and that every community that had investigated the idea had rejected it. Year-round education had faded from the American scene.

The baby boom which followed World War II placed new pressures on the public schools in the 1960s. Faced with overcrowding, a handful of schools began adopting year-round schedules in the late 1960s and early 1970s, often in response to the frustration of trying to get local taxpayers to approve bond levies to support construction of new schools.

In 1972, educators from a few of the existing year-round schools formed the National Association for Year-Round Education (NAYRE) in San Diego to promote the concept. Over the past two decades, the number of YRE programs has gradually expanded, with California and Florida leading the way. NAYRE claims there are now 1,668 schools scattered across 23 states, serving an estimated 1,350,000 students, engaged in some form of year-round education, with the number of such schools having grown 83 percent between 1990-91 and 1991-92 [Ballinger, 1992].

While YRE continues to be seen by many districts as a means of saving scarce dollars, increasingly it is being viewed as a means of improving academic performance. This has led to ***dramatic growth in single-track programs***. In the past year, single-track programs have increased their share of the nation's YRE schools from 25 percent to 46 percent [Ballinger, 1992].

YRE Plans

The year-round education concept includes a wide variety of schemes for restructuring the school year. The main purpose of all YRE programs is to provide a more continuous teaching/learning pattern for students. Existing YRE programs may be characterized by: (1) the design of the calendar; and (2) the organizational arrangement of the students.

Design of YRE calendars vary according to the length and frequency of vacation breaks, commonly referred to as ***intersessions***. For example, the most common YRE calendar is termed the 45/15 plan, which means that students attend school for forty-five days followed by fifteen days of vacation. The cycle repeats itself four times during the year. Most YRE calendars provide for 180 accumulated days of instruction per year.

There are basically two types of organizational frameworks that are used to arrange students. The simplest arrangement is called ***single-track***. This means that all of the students in the school follow the same calendar; as in the traditional school, students are all in school at the same time and they are all on vacation at the same time. ***Multiple-track*** or staggered plans allow over-enrollment of students in a limited space by dividing the student population into equal groups, with some students in attendance while others are on vacation.

Glines (1987) suggests that YRE is a ***philosophy***, not merely a mechanical rearranging of the school calendar, where the ***emphasis is on providing continuous, flexible learning opportunities***. He observes that good YRE programs purposely ***move toward non-graded learning modes and individualized instruction***. The intersessions in single-track YRE programs provide an excellent opportunity for such an approach.

Glines (1987), Ballinger (1987,1988) list more than twenty methods of rearranging the school calendar. These are summarized in Table 4 and described in greater detail in Appendix A. It appears that once the central concept of flexible, continuous learning is accepted, the number of calendar options is limited only by one's imagination! In practice, most YRE programs follow a 45/15 or 30/20 format.

Impact of Year Round Schooling

What type of impacts can be expected from moving to some form of year round schooling, assuming that the change involves only a rearrangement of the school calendar with no extension of time in the classroom?

Learning Retention. Since the establishment of a uniform school calendar of approximately 180 days early in this century, a number of studies have investigated the effects of the three- month summer break on learning retention. The results are mixed, although most studies indicate that, at least for some students, long summer vacations result in some loss of what was learned during the regular school year.

Loyd (1991) cites research going back seven decades documenting learning loss resulting from summer vacations. John Bishop (1989) notes, "Longitudinal studies of learning have found that the pace of learning slows considerably during the summer, and that disadvantaged students especially lose ground during the summer months."

Table 4. Summary of YRE Organizational Alternatives

Name of the Plan	Description
45/15	
Single-Track	One group of students; everyone follows the same 9-week learning blocks and 3-week vacation blocks.
Multiple-Track	Four groups (tracks) of students; rotated through 9-week learning blocks and 3-week vacation blocks. One group is always on vacation.
Flexible	9-week learning and 3-week vacation blocks, but with reading and math especially, and other subjects preferably, individualized so that students may jump tracks for special reasons.
60/20	
Single-Track Multiple-Track Flexible	Same as 45/15, except there are three 60 day learning blocks and 20 day vacation blocks.
Concept 6	Six 40-44 day learning blocks; students attend four of the six (two in succession) and have two separate 40-44 day vacation periods; this plan provides over-lapping days or longer school days to reach the 180-day requirement.
90/30 (Concept 6 Modified)	
Single-Track Multiple-Track Flexible	Same as 45/15 and 60/20, except students attend school for two, separated, 90-day learning blocks and have two 30-day vacation blocks.
Concept 8	Eight 6-week terms - students select if voluntary, or are assigned, if mandatory, six of the eight terms.
Concept 16	Sixteen 3-week terms - students select or are assigned 12 of the 16 weeks.
Multiple Access	A partially individualized 45/15 plan where students can enter or learn at any three-week interval, with the curriculum in three or nine week units, or individualized.
Quarter Plan	Four 12-week terms (fall, winter, spring, summer) with students opting or being assigned three of the four terms.
Quinmester	Five 9-week quinmesters, with students selecting or being assigned four of the five quinmesters.
60/15	Three 60-day terms with three 15-day vacations, and curriculum in modules that can be taught to overlapping, staggered groups.
Extended School Year	More than the 180-day calendar, with staggered blocks, such as four 50-day terms and four 15-day vacations.
Summer Term	A conventional nine-month calendar, but with a full summer term which offers continuous learning integrated with the nine-month curriculum, rather than short six-week discontinuous summer school courses.
Five Track-Five Term	Divides the school year into five 45-day terms. There are five terms in each track. Students attend four of the five for a total of 180 days of instruction annually. Used only on a multi-track basis. Provides for a common summer break of about three weeks for all students.
Flexible All Year	School is open 240 days; student can select 180 of the 240 days, with the curriculum in small self-paced packages to allow for interrupted learning blocks and differentiated vacation periods - one day to several weeks at any time.
Personalized Continuous Year	A completely flexible, personalized calendar where students can come and go as desired on a daily basis; the curriculum is totally individualized.

Source: Don Glines, Thrust for Educational Leadership, vol. 16, no. 7 (May/June 1987), p. 16; and Charles E. Ballinger, et.al., Fastback, no. 259 (1987), 16-24.

For example, a study of 380,000 New York City students showed significantly different results for children from low socioeconomic backgrounds compared to their peers. The disadvantaged students lost as much as two months of learning during the summer, while

other students continued to make modest gains over the summer, especially after the fourth grade [Heyes and King, 1974].

Similar results were reported by a 1978 New York State Board of Regents report which noted that advantaged students learned an average of one year and three months "worth of knowledge" during the school year, and an average of one additional month's growth in the summer, for a total of one year and four month's growth. Disadvantaged student learners, on the other hand, gained an average of one year and one month's growth of knowledge during the school year, and ***then lost three to four months' during the summer*** - for a net gain of seven to eight months. At the end of seven years, the advantaged child scores at the ninth grade level, the disadvantaged child at the fourth to fifth grade level and becomes a potential dropout. ***Migrant and disadvantaged children lose about 27% more learning during the summer months than their peers*** (Regent's Study, 1978, as reported by Brekke, 1992].

Supporting this view, Thomas and Pelavin (cited in Pelavin, 1979) analyzed Title I evaluation reports for a five-year period and concluded that most Title I programs were successful in raising achievement of disadvantaged students. However, they found that the achievement gains were not sustained, because progress made during the school year was diminished during the summer vacation period. Similarly, Haynes and Grether (cited in Pelavin, 1979) concluded that much of the achievement differences of students from economically disadvantaged and advantaged backgrounds could be explained by differential achievement rates during the summer. Their conclusion is reinforced by research by Murnane (1975) that shows reading and mathematics achievement of inner-city learners declines during the summer period between the second and third grades.

After noting that these findings made intuitive sense, since students from impoverished backgrounds were less likely to engage in academic activities at home, Pelavin and David (cited in Pelavin, 1979) used longitudinal data to specifically determine whether the lack of sustained achievement gains of compensatory education students was caused by summer vacations from school. Their analysis revealed that estimates of achievement gains differed dramatically when different periods of time were used in the analysis. Evaluations conducted over a 12-month period (from fall to fall) produced considerably smaller estimates of achievement than evaluations conducted from fall to spring. They concluded that substantial gains made over the year were not sustained over the summer. Further, these findings were consistent across achievement tests, grade levels, subject areas, and different programs.

If one accepts the finding that there exists, at least for disadvantaged youths, a loss of learning retention over the three-month summer vacation, can this learning loss be mitigated by having shorter and more frequent breaks? Lord (1991) notes that few empirical efforts have been made to compare the effects on student retention of learning of the traditional school calendar with those of year-round schools. Unfortunately, the studies that do exist fail to provide conclusive evidence.

Pelavin (1977) conducted a study through the Stanford University Research Institute of some 1,650 elementary school children and 1,195 secondary school children in the Pajaro Valley (California) Schools. Students from eight schools (four year-round elementary, two nine-month elementary, one year-round junior high, and one nine-month junior high) provided student achievement data.

Based on results from the Comprehensive Test of Basic Skills administered to students in grade 2 (n = 240), grade 5 (n = 252), and grade 7 (n = 459) three times (fall 1976, spring 1977, fall 1977), they found that disadvantaged students in both the year-round and nine-month programs made 12-month gains that were substantially larger than expected given prior research. The disadvantaged students in the year-round program did not suffer a loss of achievement from spring to fall, i.e., a summer loss, but unexpectedly, neither did the disadvantaged students in the nine-month program. However, the students in the study who were going to school under the traditional calendar had attended summer school. This may have skewed the results, since these students may have benefitted from more instructional time.

Loyd (1991) reported statistically significant findings in favor of year-round students when California Achievement Test scores in reading and mathematics were compared for sixth grade students who participated in year-round education programs and traditional nine-month calendar programs in the same school. Unfortunately, Loyd's approach involved analyzing end-of-year data with the preceding year's achievement scores serving as a covariate. Such a comparison fails to shed light on the issue of learning retention.

In summary, there is ***both anecdotal and empirical evidence that disadvantaged students suffer a learning loss during the three-month summer vacation***. There is conflicting evidence, however, regarding whether advantaged students suffer such a loss. Finally, the two studies that have attempted to compare learning retention under year-round education programs and traditional nine-month programs produced conflicting results, but both had methodological flaws which weakened their conclusions.

Student Achievement Under YRE. Year-round education programs generally are implemented to reduce overcrowding. Since cost-containment is central to policy makers, the relevant issue is can money be saved without adversely impacting learning? A review of the appropriate literature reveals that studies of educational achievement generally find that no adverse educational effect occurs under year-round education programs.

The Utah State Office of Education commissioned a study in 1989 of the state's year round education programs. The summary report notes that "using probability theory, Year-Round schools were found to be averaging higher test scores after the implementation than before." However, the conclusion reached was less dramatic:

> "...we can say with the implementation of Year-Round Education and all the changes which may take place simultaneously, including increased teacher

enthusiasm, more structured curriculum, and increased testing and tracking of students, academic achievement of students is not hurt and may possibly be benefitted."

In September 1990, the Albuquerque Public Schools published a YRE Evaluation Report which asked teachers and parents, "Do shorter vacation breaks enhance student achievement?" Ninety-two percent of the teachers and seventy-four percent of the parents concurred [Brekke, 1992].

After reviewing nine evaluations of achievement under year-round education programs, Merino (1983) reported that only three found YRS students outperforming students on traditional calendars, and two of those involved an increased number of days of instruction. Most studies, she reported, found no significant differences in student achievement between year-round schools and traditional nine-month programs and two YRS programs showed an achievement decline. She noted that several factors potentially contributed to this finding. First, districts implementing YRS programs often made simultaneous changes in the curriculum. It may be that curriculum changes rather than a modified calendar affected student achievement. Second, evaluation reports were often based on data obtained after only one or two years of YRS program implementation. Difficulties of program start-up and subsequent modifications potentially affected achievement results. She cited one case in which the student achievement benefits of year-round schooling did not become apparent until after four years.

A statewide study by Quinlan, George, and Emmett (1987), synthesizing information on all schools with YRE programs in California, suggests that ***the impact on achievement of such programs may differ, depending on whether they are single-track or multitrack***. The study found significant differences in student characteristics across YRS programs. Year-round schools were more likely to be found in communities with a lower socioeconomic status with about twice as many limited- and non-English speaking students as in traditional schools. Year-round schools also enrolled a larger percentage of minority students than the statewide average. California Assessment Program (CAP) results were analyzed to determine how academic achievement of students in YRS programs compared with achievement of students in traditional calendar programs. Analysis of reading and mathematics CAP scores for grades 3 and 6 revealed:

- Year-round schools perform below the level predicted for them on the basis of their student characteristics.

- When single-track and multitrack schools were examined separately, single-track schools were found to perform at or slightly above the level predicted on their background characteristics, whereas multitrack schools scored considerably below their predicted score.

- When multitrack schools were divided into large urban districts and other districts, those in large urban districts were found to be performing well below the level predicted for them in reading, whereas the nonurban schools were performing close to or at their predicted levels; and both groups of multitrack schools were found to be performing below their predicted level in mathematics, although the nonurban schools were out- performing their urban peers.

The authors concluded that while many of the year-round schools in California were not achieving at predicted levels, this was more likely due to factors unrelated to the year-round calendar, such as the special needs of the population served in year-round schools and the demographic features of the communities in which they have been placed. Given the "strong performance" of students from single-track YRE programs, however, Quinlan, et.al. concluded that the year-round calendar is a viable educational option.

Other Impacts of YRS. Pelavin (1979) has noted that the introduction of YRS programs will affect virtually all aspects of family and community life including vacation patterns, child care, recreational programs, and local businesses. Not surprisingly, proposals to switch to some form of year-round schooling seldom receive unanimous support from all members of the community. Yet, once implemented, most YRS programs are well received. Baker and Associates (1978) observed: "Our review of the YRS literature...indicates a powerful effect of liking whatever one is doing. That is, YRS participants prefer YRS by substantial majorities and TCS (traditional calendar schooling) sic. prefer TCS by substantial majorities." Below, the impacts of YRS are discussed from the perspective of students, parents, teachers, administrators, and the general community.

Students, according to Quinlan, et.al. (1987), tend to view the primary impact of YRS in terms of the vacation schedule, and generally favor the switch. About four students in ten believed that they learned more in the YRS program because the shorter vacations reduced their time to forget. Some students reported more job opportunities with the year-round calendar.

Parents who have children enrolled in YRS programs also tend to have favorable attitudes toward the approach, according to reviews of six YRS studies [Merino,1983], as well as surveys by Loyd (1991) and Young and Berger (1983). Pelavin (1979) also reported that parents surveyed in his inquiry thought highly of the program, and did not perceive negative impacts on family life because of the YRS calendar. In the statewide evaluation of Utah's Year-Round and Extended Day Schools directed by Dr. Adrian Van Mondfrans (1989), between eighty and ninety percent of patrons surveyed indicated YRE as the same or better than the traditional calendar on all nine aspects of the school experience, including overall quality of the program, child's opportunity to learn, and individual attention received by the child. Seventy-eight percent of the YRE patrons gave year-round schools a positive or very positive overall rating.

When asked to express a preference for a solution to housing students in their district, 78 percent preferred year-round schools to all other possibilities. [Not surprisingly, only 8% favored the alternative of raising taxes!]

On the other hand, Quinlan et.al. (1987) reports that parents were divided in their perceptions about YRS. Between a third and half of the parents surveyed did not see much difference between YRS programs and traditional nine-month programs in terms of quality of instruction, student attendance, child care arrangements, appearance of the schools, and communications.

Teachers in YRS programs generally express highly favorable views about the instructional benefits of YRS. Shorter vacation times reduce retention loss and thus reduce the time devoted to review. Teachers claim this phenomenon is especially true for high-risk students. The YRS program appears to be accepted more by teachers as they gain first-hand experience with it. Yet teachers indicate that working in a YRS program requires more coordination and is more demanding than teaching in a traditional nine-month program [Pelavin, 1979; Quinlan, et.al, 1987].

In the Utah YRE evaluation (1989), teachers were asked to respond to two questionnaires. On the ***Maslach Burnout Inventory***, only one percent of year-round teachers rated high on all subscales, indicating the presence of the psychological construct referred to as "burn out." Teacher responses to the second questionnaire confirmed that year-round teachers did not experience an extreme amount of stress. While 73 percent of year-round teachers with traditional contracts reported they experienced less stress on the year-round calendar than on the nine-month calendar, only 45 percent of year-round teachers on extended contracts responded that the YRS calendar was less stressful.

Utah teachers indicated that under YRS student attitudes were improved(76%), students learned more (73%), and students returned from breaks ready to work (93%). Overall, 84 percent agreed that YRS benefits students.

Through interviews, it was determined that the greatest drawback perceived to a YRS program was the stress involved in changing rooms after track changes. Teachers whose own children are not on a YRS calendar reported some problems with scheduling. And teachers who have lucrative summer employment and have not been able to obtain extended contracts expressed concern about a loss of income. Nonetheless, 84 percent of the YRS teachers stated that, given a choice, they would teach on a year-round calendar.

Administrators were surveyed by Quinlan and associates (1987) regarding the effects of YRS. Interestingly, nearly two-thirds of both single-track and multitrack administrators indicated teacher attendance increased markedly in a year-round program. However, increased student attendance was not uniformly observed, with about half of the multitrack program administrators indicating an increase in daily attendance while others thought student attendance no different from the traditional school calendar. About half of the

administrators surveyed expressed the view that student performance had improved or remained the same after the implementation of a YRS program. Secondary principles generally agreed that YRS programs increased student job opportunities. Finally, in identifying potential obstacles to YRS, principals noted that the need for maintenance and storage space for supplies and resources of the off-duty teachers and roving teachers required year-round faculty members in multitrack programs to be both flexible and creative.

Community agencies are often contacted to assess the impact of YRS on their operations. Pelavin (1979) indicated that interviews with community interest groups revealed improved vacation opportunities for families whose children attended a year-round school. He also reported that the YRS program in the Pajaro (California) Schools had little impact on the community at large. Quinlan and Associates (1987) report that schools surveyed indicated increased interaction with parks and recreation agencies concerning student recreational opportunities during their vacations. They also indicated a wide range of responses from YRS programs regarding contact with law enforcement agencies. Where such contact increased, it was attributed primarily to identifying truants, but on the positive side less vandalism and crime were reported, especially by multitrack programs.

Cost of YRS. Does a YRS program cost less than a traditional nine-month school? The answer depends on a district's classroom space and student population. Brekke (1984) observes that before any school district converts to YRS, they must first ask the question, "Why should we change?" Why would a school district that has been operating under a traditional calendar elect to make such a dramatic change? If there is a shortage of classroom space due to a growing school population, then YRS may be seen as a means of utilizing existing facilities more efficiently in order to accommodate more students and avoid construction of new facilities. Only a multitrack YRS program, however, increases the capacity of existing schools. By staggering instruction blocks and vacation periods, multitrack YRE programs can expand the number of students that can be accommodated in an existing school by from as much as 25 to 50 percent. Single-track programs, on the other hand, do not permit an increase in school facilities usage, and are not expected to produce cost savings.

Baker, Pelavin, and Burnett (1978) identify three approaches to determining the relative costs of a YRS (multitrack) program:

1. Comparison of the YRS budget with the budget for prior years under the traditional nine-month program.

2. Comparison of the budgets for a school operating under the YRS calendar with a "matched" school operating under the traditional nine-month calendar.

3. Comparison of the budget for a school operating on the YRS calendar with a simulation of what it would cost to deliver the same educational program under the traditional nine-month calendar.

They suggest that fundamental problems, i.e., inflation, seniority of teachers and the difficulty of matching schools on a myriad of variables, made the first two options inadequate for evaluating YRS costs. Thus, by process of elimination, the optimal approach is to develop a simulation cost model. This approach is based on developing a detailed accounting of the YRS's educational program and then generating estimates of what costs would have been incurred to operate the same curriculum in a traditional nine-month school at the same site for the same year. By using the present year's cost for only one school, the challenge of comparing "matched" schools and controlling for inflation and other variables is removed.

From the perspective of a state department of education, Quinlan and associates (1987) indicate an analysis of costs associated with the use of a year-round model must take into account: avoided costs, transition costs, projected operating costs and incidental differences in operating expenses due to unanticipated effects of converting to year-round education.

Avoided costs for multitrack YRS programs include the opportunity costs associated with relying on other alternatives for addressing overcrowding. These could include: busing, if alternative space is available; operating double sessions; using portable buildings as classrooms; and construction of new facilities. Care must be taken to compute accurately all of the costs of each alternative. The costs of the least-costly, acceptable alternative are then included in the simulated budget of the traditional calendar program.

Transition costs include expenses for feasibility studies, administrative planning time, teacher in-service on YRS, community awareness campaigns, and building modifications (e.g., air-conditioning). Of these, perhaps the most critical to the eventual success of the YRS program is the expenditure for communication with community leaders, parents, and patrons.

Projected operating costs depend on the number of students served as well as the number of days school is in session. They include both fixed costs, such as instructional resources, nonconsumable supplies, and teacher and student furnishings; and variable costs, such as increased personnel costs,(including additional contract time for teachers), utility costs, maintenance costs, consumable supplies, and transportation. As a rule, it would be expected that YRS and traditional calendar programs would have similar fixed costs, but their variable costs would differ.

Incidental costs take into consideration cost adjustments not directly related to funding the school's program. They depend on the organization and implementation of the YRS program in each school district, and appear to be related more to community characteristics than to the special requirements of a YRS program. YRS programs frequently result in reduced absenteeism and vandalism. For example, the Oxnard School District reported dramatic reductions in losses due to burglary and vandalism as well as reduced school absences following the implementation of its YRS program. School officials attributed these phenomena to the effects of the YRS schedule [Brekke 1986]. On the other hand, the community may incur additional costs for providing recreational opportunities year-round.

Once computed, avoided costs, transition costs, projected operating costs, and incidental costs are used to compare the budget for a YRS program with a simulated budget for a traditional (TCS) nine-month calendar program. Costs associated with each category are calculated, summed, and then combined:

YRS budget = Actual Operating Costs + Transition Costs + Incidental Costs

TCS budget = Avoided Costs + Projected Operating Costs

The simulation approach was used by Pelavin (1979) to determine the impact of the YRS program in the Pajaro Valley (California) Unified School District on capital costs, operating costs, and transition costs. He found the YRS program reduced the school district's annual per-pupil cost of education by 4.1 percent. More than ninety percent of this saving was attributable to the efficient use of classrooms and schools. Since the district had implemented the 45-14 multitrack format, student capacity was increased up to one-third. This additional space reduced overcrowding and double sessions were eliminated without construction of new schools or classrooms. Pelavin also reported that YRS programs resulted in a slight (0.3 percent) reduction in the district's operating costs. Using the simulation method, he determined that teacher costs (salary and fringe benefits) were less under the YRS calendar than under the traditional nine-month calendar. However, administrative costs (principal's salary and office support staff salaries) were higher under the YRS calendar. Finally, he reported the YRS program required only modest transition costs.

Brekke (1986) reported that during the 1984-85 school year, the Oxnard (California) School District elementary enrollment increased by 644 students. If these students had been housed in traditional nine-month classrooms the district would have needed to construct one additional school at an estimated cost of $5 million. Under its YRS program, Oxnard experienced a total operating cost saving of $908,061. Since converting to YRS in 1976, the Oxnard District estimates it has saved $16 million in new building costs [Brekke, 1989].

Quinlan and associates (1987) report that the major savings associated with YRE programs are in avoided costs. Little difference is noted between YRE and traditional calendar schools in actual and projected operating costs per student. Transition costs for YRE generally are modest in comparison to avoided costs, and incidental costs, if they influence the situation at all, appear to reduce the expense of year-round programs.

William White (1991) has examined the unanticipated costs of returning to a traditional nine-month calendar when the multitrack YRS program in Jefferson County, Colorado was terminated in 1988, after 14 years of operation. The program had resulted in an estimated cost-savings of $87.7 million in capital expenditures. Yet district leaders were dismayed to discover unreported savings in operating costs under YRE, which only became apparent when the new schools necessary for operating a traditional nine-month calendar were opened.

On September 22, 1990, the Governor of California signed into law AB 87 which provides financial incentives to districts which adopt a year-round school program, including special

per-student payments and first-call on school construction bond funds. Governor Deukmejian noted, "It is simply inexcusable and wasteful to allow school facilities to sit idle and unused for up to three months per year [Brekke, 1992]."

The California legislature has indicated that the state's primary interest in year-round education is its potential for reducing school districts' demands for limited state resources to construct new school facilities. California currently provides three types of assistance to YRE schools: air conditioning funds, implementation/planning grants, and operational grants. The latter are non-competitive, continuing incentives for districts which can document substantial projected overcrowding and commit to the operation of a multitrack YRE program to increase the capacity of the district, and which would be eligible for state construction funding if they were not operating on a year-round basis.

The amount of the YRE operational grant is equal to: (a) the number of excess pupils housed at a school beyond its traditional-year capacity; multiplied by (b) the assumed state cost avoided per pupil of $1,151 (construction, land, including relocating expense, and interest saved by the State in bond revenues); multiplied by (c) 50% to 90%, depending upon the percentage of pupils certified to be in excess capacity.

In summary, a multitrack YRE program has the potential to reduce educational costs in communities experiencing population growth and a shortage of classrooms. The best means of computing the potential savings is to employ a cost simulation model.

The bulk of the savings will be in the form of reduced capital costs. Therefore, the magnitude of savings will depend on the extent to which existing school capacity is increased. The extent to which capacity can be expanded under a multitrack program depends on the number of tracks. A two-track program hypothetically could double the capacity of a school, while a three-track program potentially offers a 50 percent increase, and a four-track program could yield a 33 percent rise. Where state funds are used to construct new school facilities, it makes sense to share the cost-savings with districts as an incentive to undertake YRE.

IV. PUBLIC ATTITUDES IN TEXAS TOWARDS YEAR-ROUND EDUCATION

In order to assess educational programs and gain information useful in policy making, the Public Policy Resources Laboratory (PPRL) at Texas A&M University was commissioned to conduct a survey of attitudes towards year-round education as part of the Winter 1992 Texas Poll. A telephone poll was conducted during January and February 1992. The results of the poll are summarized below, and a complete copy of the report prepared by PPRL is included as Volume II.

Respondents throughout Texas were drawn from a randomly selected sample of households with telephones. A total of 1,003 individuals over the age of 17 were interviewed. Based on the sample size, the maximum error due to sampling is approximately plus or minus 3 percent. Seventy-one percent of eligible respondents agreed to be interviewed, a good rate of cooperation for a telephone survey. Conventional professional telephone sampling procedures were used. (A copy of the questionnaire is contained in Appendix A in Volume II, while a listing of the final disposition of all calls and a detailed description of the sampling procedure are provided in Appendix B.)

Respondents were asked to evaluate commonly cited advantages and disadvantages of year-round schooling, and whether they would support adoption of year-round schooling. Responses were examined in the aggregate and analyzed by respondent demographic characteristics to see if replies differed by social or economic circumstance.

Several multivariate regression analyses were undertaken to describe the direction and strength of relationships between important demographic variables and respondent reaction to arguments in favor of or against year-round schooling. Each regression equation represents a model of the relationship between a dependent variable, whose variation is to be explained, and one or more independent variables which are thought to be capable of explaining that variation. Thus, regression analysis enables one to infer the extent to which changes in independent or explanatory variables, (i.e., gender, parenthood status, income, racial identification, occupation, age, political ideology, and education) are related to changes in dependent or predicted variables (i.e., evaluations of year-round schooling, the advantages and disadvantages of providing child care, the cost of child care, school building utilization, reduction in summer juvenile crime rates, minimizing semester student breaks, possible disruption of summer vacation schedules, and possible disruption of summer student programs).

Multivariate regression analysis also permits the investigation of the relationships between two variables while controlling for or holding constant the effects of other variables which are included in the equation. For example, one can examine the effect of income on attitudes towards year-round schooling while controlling for the effect of racial identification on evaluation of year-round schooling if both income and racial identification are included in

the model used to explain opinion. Thus, if there is a significant difference between the attitudes of people with low and high incomes, it cannot be attributed to differences in racial identification because that possibility was controlled for in the model.

Opinions Regarding the Advantages of Year Round Education

Respondents were read a list of five possible advantages of year-round schooling and asked to evaluate each as very important, somewhat important, not very important, or not an advantage. The factors considered were: provision of child care; lowering of the cost of child care; better and more efficient year-round use of school buildings; lowering the summer rate of juvenile crime; and improving student learning and retention by minimizing long breaks.

Child care. Sixty-eight percent of respondents thought providing child care and 71 percent believed lowering the cost of child care were important benefits of year-round schools (includes both those ranking this item as very important and somewhat important). A plurality of those surveyed felt the provision (43 percent) and reduced cost (46 percent) of child care were very important advantages to extending the school year. The majority of respondents identifying themselves as Black (57 percent) or Hispanic (61 percent), as having less than a high school education (52 percent), as earning less than $20,000 per year (58 percent), as working in blue collar occupations (51 percent) or keeping house (51 percent), or as democrats (52 percent) or liberals (50 percent) found the child care arguments very important. Both parents and non-parents agreed that provision and cost of child care were significant, although parents were slightly more likely than other respondents to find these issues very important. However, the differences were within the bounds of sampling error.

Attitudes toward child care provision and cost were investigated using a regression model which included respondent gender, occupation, age, racial identification, income, political ideology, parenthood status, and level of education. Of these, the significant predictors of feelings about the importance of child care as an advantage of year-round schooling were racial identification and income. Members of racial minorities were significantly more likely than Anglos to consider provision and cost of child care important. As might be expected a priori, higher income individuals were significantly less likely than others to rate provision and cost of child care as important.

Efficient Use of School Buildings. Eight out of ten respondents judged the efficient use of school buildings to be an important advantage of year-round education. A majority of every demographic category deemed efficient use of facilities to be very important. Regression analysis revealed no significant differences in attitude among respondent groups.

Reducing Juvenile Crime Rate. More than eight out of ten respondents believed that lowering the juvenile crime rate in the summer months was a very important advantage of year-round schools. Regression analysis indicated that members of racial minorities were significantly more likely than Anglos to regard lowering the summer juvenile crime rate as a

very important advantage of year- round schooling. Income was also a significant predictor. Respondents with higher incomes were less likely than others to consider crime reduction important.

Minimizing School Breaks To Improve Learning Retention. Seventy-seven percent of respondents deemed improved student learning and retention due to minimized school breaks an important advantage of year-round education, with fifty-four percent ranking it as a very important advantage. A majority of all demographic categories felt improving retention by reducing the length of recesses was very important. Regression analysis revealed no significant differences in attitudes among respondent groups.

Opinions About the Disadvantages of Year-Round Education

Respondents were read a list of three commonly-cited disadvantages of year-round education and asked to evaluate each as very important, somewhat important, not very important, or not a disadvantage. The factors included: provision of child care; synchronization of vacation schedules; and interference with student participation in summer programs.

Child Care. Although nearly half of the respondents indicated that providing child care was a possible disadvantage of year-round schools, four out of ten felt it was not an important issue. Almost one-third of the respondents believed that provision of child care was not a problem at all. Regression analysis did reveal several significant disparities in the perspectives of different demographic groups. Older respondents were more likely than younger ones to consider providing child care an important disadvantage of a year-round educational format. Respondents with more years of schooling were more likely than others to rate child care provision as no disadvantage. The responses of members of racial minorities are particularly interesting. Minority members were more likely than Anglos to regard provision of child care as an important advantage and an important disadvantage of year-round schools. It is likely that such a bi-polar result is due to the salience of child care issues to this segment of the community.

Synchronization of Vacation Schedules. Two-thirds of those polled felt that vacation scheduling was an important problem associated with year-round schooling. Forty-three percent felt the vacation issue was very important. Regression analysis indicated that age and education were significant predictors. Older respondents were more likely than younger ones to consider lack of synchronous vacation schedules an important disadvantage of a year-round program. Respondents with more schooling were more likely than others to rate vacation scheduling as no disadvantage.

Interference with Participation in Summer Programs. Six out of ten respondents considered the possibility that year-round classes might interfere with students' participation in summer activities, such as sports camps, to be an important disadvantage of a revised education calendar. Thirty percent judged disruption of summer activities to be a very

important disadvantage. Regression analysis indicated that members of racial minorities were significantly more likely than Anglos to regard conflict with summer programs as a very important disadvantage of year-round schools.

Support for Adopting Year-Round Education

Respondents were asked whether they strongly agreed, agreed, disagreed, or strongly disagreed with the idea of adopting some form of year-round schooling. Six out of ten of those polled agreed with the notion.

Multivariate regression analysis of opinions of different demographic groups about the provision of YRE indicated significant predictors of support were racial identification and education. Members of racial minorities were more likely than Anglos to strongly approve a year-round school calendar, while respondents with more years of schooling were more likely than others to strongly endorse YRE.

Respondents to a subsequent Texas Poll, conducted in Spring 1992, were also asked about changing the educational year. "Should Texas change its public school calendar to year round-education in order to save the state money?" On this occasion, the plurality of those polled indicated opposition to such a plan (40 percent yes, 48 percent no, 12 percent don't know). However, the Spring Poll contained no prefatory questions about the advantages or disadvantages of year-round education. When asked for their position on an unfamiliar issue which calls for substantial policy change, people often favor the status quo.

Such a response profile suggests that commitment to a position on the school calendar is fairly weak and attitudes are malleable. Most individuals, upon consideration of the consequences, seem disposed to favor a change in the teaching year. Discussions about using school buildings efficiently and shortening vacation periods to improve learning retention appeal to all demographic segments. Members of racial minorities are particularly swayed by appeals to increase the ease and reduce the cost of child care and lower the summer juvenile crime rate.

It appears that a change to year-round schooling would likely receive wide public support provided a concerted effort is made to communicate with the public the rationale for such change. The media can play an important role in this process. Given the persistent opposition to year-round schools by at least a small minority of the public, however, a move to year-round education would stand a better chance of gaining widespread support if it were made voluntary, at least in the initial stages.

V. THE STATUS OF YEAR-ROUND EDUCATION IN TEXAS

Forty-one Texas school districts were identified as participating in some form of year-round education (YRE) in the 1992-1993 school year. As shown in Table 5, a telephone survey indicates that twenty-two of the twenty-six districts conducting YRE programs in 1991-1992 will continue or expand their programs, while nineteen districts say they will implement new YRE programs for the 1992-1993 school year. [The Laureless and Santa Gertrudis districts offer a combined program and are counted as one district in this report.] The 158 participating YRE schools enroll approximately 54,600 students, mostly at the elementary level.

Table 6 indicates that only three districts offer a multi-track program. Of the 41 districts operating some form of year-round education in 1992-1993, 18 employ a 45/15 track program, 14 a 60/20 days program, and 10 a 30/10 day program [with one district offering both a single track and a multiple track program].

Table 5. Summary of Year-Round Education in Texas

Total Number of Districts Participating in YRE		
Number with YRE Programs in 1991-92	26	
Number canceling YRE program	4	
Number continuing YRE programs	22	
Number initiating new YRE programs	19	
Total YRE participating districts		41
Total Number of Schools Participating in YRE		
Elementary	138	
Intermediate	19	
Secondary	1	
Total 1992-1993		158
Total Number of Students in YRE		54,600

Source: Telephone survey of districts identified by the Texas Education Agency and through contacts at the YRE meeting.

Table 6. Overview of YRE Programs in Texas

Number of Single Track Programs:		
60/20	11*	
45/15	18	
30/10	10	
Total		39*
Number of Multi-Track Programs:		
60/20	3*	3*
Total		41*

Note: * Includes one district, Socorro, with both single-track and multi-track programs.

Teacher Response

Districts surveyed indicated they had asked their teachers if they would want to teach in the year-round calendar rather than the traditional calendar. The response from teachers was reported to be overwhelmingly positive. There were often more teachers desiring to teach in the year-round program than there were students ready to participate in such a program. Districts reported that where an entire school was scheduled to be converted to a year-round calendar, only a few teachers requested a transfer or left to teach in another district. In most cases, this was due to the teacher having a child or spouse remaining in the traditional calendar at another school and the desire to keep the breaks and vacations consistent within the family.

One factor attracting teachers to a year-round calendar is the opportunity to earn more money. Since teachers are paid an additional stipend for teaching in the intersession, many see this as an advantage of year-round schools. While they could also earn additional money by teaching in the traditional summer school, a calendar providing more frequent but shorter breaks provides much more flexibility to those who would like to have some vacation time but also some opportunity for earning additional income. These teachers elect to teach one or more of the intersessions, but use at least one of the intersessions for vacation.

Community Response

Community response to year-round education is reported to have been mixed. Most districts reported strong community support for the move to YRE. Prior to implementing a year-round calendar, the districts would use town and PTA meetings and announcements to educate the community on YRE plans. In most districts, participation in YRE was made voluntary, adding to community acceptance of the program.

A few areas reported that there was organized opposition to a year-round calendar. The opposition came from groups such as SOS - "Save Our Summers," SOC "Saving Our Camps," FOCUS, and TLC "Traditional Learning for Children." Some of these groups have made investments assuming a traditional nine-month calendar and fear YRE would threaten that investment.

Rationale for the Move To Year-Round Schooling

The most commonly cited reason for the shift to an extended year calendar was to help overcome retention loss created by a three month break. The schools selected for participation in YRE programs frequently were those having low achievement scores.

Some schools cited a desire to improve minority performance as a reason for moving to an extended school year calendar. This was particularly the case with schools in the Lower Rio Grande Valley which have large numbers of children of migrant workers. For example, one Valley superintendent explained that many of his students begin school six to eight weeks after school has started in late August. Thus, they start out behind their peers. And many leave

before school has ended in May. With a year-round calendar, he said it was much easier to place those students in a track which could move at their speed and then use the intersession to provide "catch-up" instruction.

Some districts stressed that the year-round calendar enabled them to provide a much broader and educationally stronger enrichment program. The intersessions were seen as providing an opportunity for enrichment tailored to individual student needs and interests.

Only a few districts indicated that the move to YRE was motivated by a desire to relieve overcrowding in their schools. Most of those saw adoption of a single-track program as a means of moving to an eventual multitrack program.

Thus ***the adoption of a year-round calendar by Texas school districts*** in the great majority of instances ***was not motivated by a desire to save money, but by a desire to improve student academic performance***. This appears to fly in the face of conventional wisdom among the general public, which generally sees year-round schooling as a means of more efficiently utilizing school facilities and relieving overcrowding.

When the public begins to understand that the move to year- round schools will not save money (and may, in fact, cost slightly more), there may be an erosion of support for the concept. It is therefore important that districts seeking to implement a year- round calendar make every effort to communicate to the public the educational benefits of the change.

VI. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The principal conclusions of this study *concerning expanding time in school* are as follows:

- Research indicates that significant increases in time in the classroom would result in some improvement in student academic achievement.

- The cost of significantly increasing time in the classroom would be quite high, on the order of $1 billion a day nationally.

- The relevant issue for policy makers is whether extending time in the classroom is a more **cost effective** way of improving student achievement than an equivalent expenditure for other alternatives such as summer enrichment programs, higher teacher pay, additional supplies and equipment, or increasing actual learning time under the existing calendar.

With regard to year-round schools, the principal conclusions are:

- There is a considerable body of opinion and some research evidence that the three-month summer break results in a loss of learning retention, particularly for disadvantaged youth. However, as of yet there is no confirmation from empirical research that student learning retention increases under YRE programs.

- Evaluations of academic achievement under various forms of YRE provide an insufficient foundation for judging the desirability of such programs. Not only have relatively few studies been made, but their research designs have often been flawed.

- Since multitrack YRE programs are aimed at saving money, academic evaluations of such programs have focused on whether student achievement is at least equal to that obtained under the traditional nine-month school calendar. Most research indicates multitrack YRE programs meet this modest standard, although at least one study found otherwise.

- Only one study was found which assessed student academic achievement in single-track programs. It suggests that such programs can be effective in improving academic achievement.

- There is a need for research which would follow closely a common group of students over several years. Achievement results under YRE programs should be compared with those under traditional nine-month calendar programs, in the same school if possible. Care should be taken to ensure that there are no major differences in curriculum, in the make-up of the student body, or in other factors that might influence achievement.

- Intersessions are a critical component to the success of single-track YRE programs and there is a need for more information on the experience with intersessions, particularly on their success in attracting students who need remediation.

- With proper implementation, YRE programs likely will be accepted by students, teachers, administrators, and their community.

- Multitrack YRE programs offer potential capital savings due to more efficient use of facilities. Single-track YRE programs are likely to cost as much as or more than schools operating under the traditional nine-month calendar.

The Texas poll survey of more than a thousand households leads to the following conclusions:

- While commitment to year-round schooling is fairly weak, most Texans are favorably disposed towards giving YRE a try.

- The principal arguments leading to favorable views of YRE are using school buildings more efficiently and improving learning retention. Increasing the availability and reducing the cost of child care and reducing summer juvenile crime are particularly attractive arguments in favor of YRE for members of minority groups.

- Given the persistent opposition to YRE by a significant but relatively small (20% or so) minority of respondents, success in moving to year-round schooling will depend heavily on a concerted effort to communicate the rationale for the change to the general public.

- Widespread support for YRE will be more likely if the change to a YRE calendar is made optional, at least initially.

Finally, conclusions reached from an informal survey of school districts in Texas that had indicated they were implementing a year-round calendar are:

- YRE is growing in Texas, as districts seek ways to improve academic performance and meet the special needs of minority populations.

- YRE programs will receive broad support from students, teachers, parents and others provided districts make concerted efforts to inform the community and make the program voluntary in its initial stages.

Recommendations

1. It is recommended that Districts planning to implement YRE make a concerted effort to inform their community about the nature of the program and its intended impacts and make the program optional in its initial stages.

Poll results indicate that while most individuals are receptive to the concept of year-round education, their commitment is quite weak. Poll results also show many misconceptions about YRE programs and opposition from a small but nonetheless significant segment of the

population. The informal survey of school districts in Texas which are implementing a YRE program indicates that a careful effort to inform all segments of the community of the plans for YRE greatly increases support for the program. Experience also has shown that YRE programs gain better acceptance where participation is made optional.

2. It is recommended that the Texas Legislature consider rewarding districts that adopt multitrack YRE programs by sharing some of the cost-savings.

California has a program of sharing with the affected districts the cost-savings from more intensive utilization of school buildings in multitrack YRE programs, which expands the capacity of a school site and commensurately reduces the need for new facilities. As Texas assumes more responsibility for financing school facilities (an essential component of school finance equalization) it should consider adopting a similar program, provided it can be demonstrated that educational quality will not be impaired by a move to multitrack year-round schools.

3. It is recommended that the Educational Economic Policy Center sponsor an experimental study on the impact of alternative school year scheduling in Texas public schools on learning retention and academic achievement.

A number of Texas school districts are beginning implementation of a YRS program. Most of these programs are motivated not by a desire to save money, but by a belief that academic achievement can be improved by rearranging the school calendar to have shorter and more frequent vacation periods. Thus, most of the programs beginning in Texas are single-track in format.

Unfortunately, there is little evidence from previous research comparing student retention of learning under the traditional nine-month calendar (without summer school) and under a modified YRS calendar. Moreover, most research aimed at evaluating academic achievement under YRE programs has focused on multitrack schools (because until last year, they constituted the bulk of such programs). But interest, both in Texas and across the nation, appears to have shifted to single-track programs.

Thus, there is a need for a well-designed longitudinal research effort to ascertain achievement results under single-track programs. The study should involve several sets of schools in districts operating both traditional and year-round calendar schools. Learning retention in each type of school would be evaluated using standardized tests administered in September, May, and the following September. Care should be taken to ensure that the same group of students are followed over several years, that both the YRE and comparison classes follow the same curriculum, and that the demographic characteristics of both sets of students are similar.

A sample RFP for such a study is presented in Appendix C.

It is estimated that the total cost of each round (fall, spring, and fall) of the study would be $60,000. Ideally, the study would follow the progress of a specific set of students in each type of program for several years, raising the projected cost to about $180,000.

4. It is recommended that the Texas Education Agency collect and analyze information on intersession programs being used in YRE single-track programs in Texas and disseminate the results to all school districts in the state.

One of the most important facets of a single-track YRS program is the use of the intersession. It would be helpful to have more information about what type of programs schools are offering in the intersessions and about the extent of student participation in such programs. Of particular importance, given the desire to improve the academic achievement of disadvantaged youth through more frequent remediation, is the extent to which such students take advantage of intersession opportunities.

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APPENDIX A

DESCRIPTION OF YRE PLANS

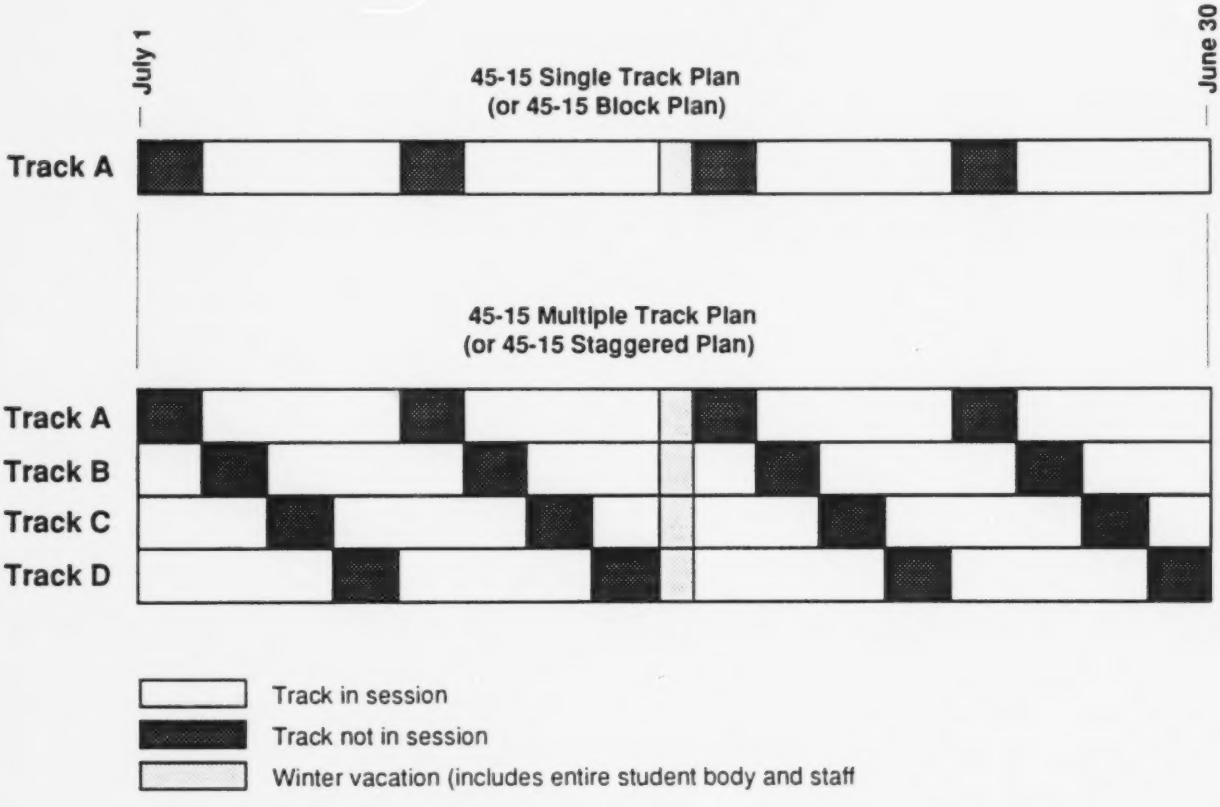
The following description of YRE plans is taken from Norman R. Brekke, Year-Round Education Calendars, Oxnard, California: Oxnard School District, June 1991.

45/15

One of the easiest plans to implement at either the elementary or secondary level is the 45/15 calendar. This plan divides the year into four nine-week terms, separated by four three-week vacations or intersessions. Students and teachers attend school for nine weeks, then take a three-week vacation. This sequence of sessions and vacations repeats four times each year, thus providing the customary 36 weeks or 180 days of school. Four additional weeks each year are allocated to winter holidays, spring break, and national, state, or local holidays.

The 45/15 plan can accommodate either a single-track plan or a multi-track plan (see Figure 1). In a 45/15 multi-track plan, students are divided into two to four groups, depending upon enrollment. For example, in a four-track version of the plan, while groups A,B, and C are in school, group D is on vacation. When D returns, A goes on vacation. Teachers usually follow the track schedules of their students. However, they can be reassigned to another track, thereby lengthening their contract year and earning a larger salary.

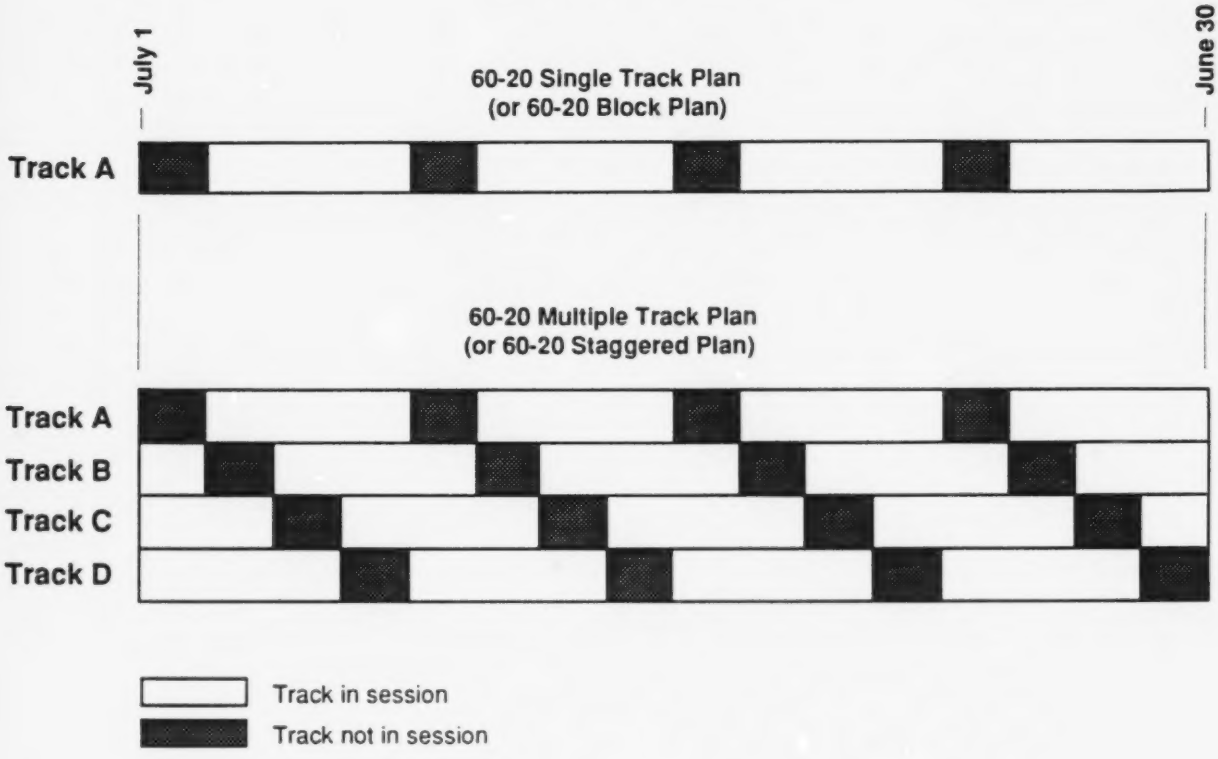
Figure 1



60/20

The 60/20 plan is simply a variation of the 45/15 schedule, with students attending school for 60 days and vacationing for 20 days. Students rotate through the year until they have had three 60-day terms and three 20-day vacations. The 60/20 plan can be varied to take account of holidays and state attendance regulations. It can be conducted in either a single-track or mutlitrack format (see Figure 2).

Figure 2



60/15

Borrowing from both the 45/15 and 60/20 plans, the 60/15 plan involves an instructional period of 60 days and a vacation period of 15 days. By rearranging the instructional days, a common summer vacation of three to four weeks can be given to all students and faculty. 60/15 plans generally involve five tracks.

90/30

This schedule consists of two 90-day semesters separated by a 30-day vacation period. Schools are closed during the traditional winter holiday period and spring break. As in the 45/15 and 60/20 plans, this calendar can be conducted either as a single-track or a multi-track plan.

Trimester

The trimester plan uses three instruction periods of 60 days each rather than two semesters of 90 days each. The plan is similar to the 60/20 plan, but the vacation (intersession) periods are more flexible and may vary from two to six weeks, depending on the calendar adopted by the community.

Quarter

One of the best known, and perhaps easiest to understand, of the YRE plans is the quarter system. It was the first year-round calendar implemented in the early 1900s after the nationwide adoption of the nine-month school year. Some colleges also use this plan. The quarter plans divide the calendar into four 12-week periods generally corresponding to fall, winter, spring, and summer. Students may select, or may be assigned to, any combination of three of the four quarters. They may attend the fourth quarter on a voluntary basis. The curriculum is so organized that each quarter is a separate entity. A course begins and ends with each 12-week period. Subject areas requiring sequential instruction, such as mathematics, are offered in each of the four quarters.

Quinmester

The quinmester plan divides the school year into five parts, with students required to attend four of the five periods. This calendar is most often used at the secondary level for grades nine through twelve. The school year may range up to 220 days, with vacation periods averaging about seven weeks. The quinmester plan often operates on a single-track pattern.

Concept 6

The Concept 6 plans calls for six-terms of approximately 43 days each. Students attend four of the six terms, but must attend two of the four terms consecutively. The plan provides for 160 or more days of instruction each year. Additional days can be completed by overlapping the groups on half-day sessions the first and last day of each term, by independent study, or by creative off-campus group activities in order to satisfy legal requirements for 180 days of instruction.

Concept 6 has been used extensively at both the elementary and secondary levels. It is particularly useful when there is a lack of space. It requires that students be divided into three groups, with one group always on vacation, thus releasing a considerable amount of space for instructional use. A high school built for 1,600 students can house 2,400 under a Concept 6 three-track plan. It can also be administered as a single-track pattern.

Five-Track Five-Term

As its name implies, the five-track, five-term plan organizes students into five groups and divides the school year into five 45-day terms. Students attend four of the five terms for a total of 180 days of instruction annually. Used only on a multi-track basis, this plan provides for a common summer break of approximately three weeks for all students.

Flexible All Year

The ultimate in year-round education, this plan calls for school to be open for instruction approximately 250 days a year. Students are required to attend the minimum number of days designated by each state. To operate this plan, teachers must be willing to individualize instruction. Students have three choices: (1) they may attend all days that the school is open for additional learning opportunities; (2) they may attend only the required 175-180 days, spreading these days over the 240-250 days available; or (3) if a family elects to follow the traditional nine-month calendar, students can start by a set date in September and finish in June, completing 180 days of instruction.

Intersession: A Key Link

A key element in any YRE plan is the intersession, the year-round equivalent of summer school, but with a totally different perspective. Intersessions are considered a continuous part of the learning process, not isolated summer courses. The majority of students return for two or three intersession enrollments.

The Process of Adopting YRE

The ***school within a school*** plan involves offering both the traditional nine-month and year-round options within the same building. An alternative is to pair geographically close schools, so that families have the choice of a neighborhood nine-month or year-round calendar. A third model is to create the neighborhood cluster where one of three or four buildings offers the option of a continuous learning design. A fourth effective pattern is to develop a YRE structure that can accommodate either a nine-month or continuous year option within the same calendar, such as is possible in the Concept 8 or Flexible All Year Plans.

APPENDIX B
RESULTS OF AN INFORMAL SURVEY OF TEXAS YRE PROGRAMS

Table B-1 Aggregate YRE Summary of School Districts in Texas

Table B-2 District YRE Summary

Table B-3 Texas YRE Districts Information

Table B-1
AGGREGATE SUMMARY OF
SCHOOL DISTRICTS IN TEXAS

Total number of students participating in YRE : 54600

Total number of schools participating in YRE : 158

Elementary : 138

Intermediate : 19

Secondary : 1

Total number of districts participating in YRE : 42

Total number of districts with existing YRE : 22

Total number of districts with pilot programs : 19

Total number of districts with canceled YRE in 1992 : 3

Table B-2 District YRE Summary

Districts	Enroll	School	Elem	Inter	Secon
Aldine	1000	2	2	0	0
Alief	1900	2	2	0	0
Allen	1400	5	5	0	0
Arlington	200	2	2	0	0
Austin	530	1	1	0	0
Axtell	65	1	0	1	0
Beaumont	500	2	2	0	0
Brazosport	500	4	3	1	0
Brownsville	2500	5	5	0	0
Canyon	154	1	1	0	0
Conroe	1250	10	6	4	0
Coolidge	240	2	1	1	0
Cypress Fairbanks	1600	2	2	0	0
Dallas	1200	3	3	0	0
Deer Park	350	3	3	0	0
Driscoll	210	1	1	0	0
Ector County	531	1	1	0	0
Fort Worth					
Friendswood	470	2	1	1	0
Harlandale	3550	9	7	2	0
Harlingen	1300	4	4	0	0
Irving	700	2	2	0	0
La Porte	250	3	3	0	0
Laureles/Santa Gertrudis	100	1	1	0	0
Longview	275	1	1	0	0
North East	475	1	1	0	0
Northside	5000	27	27	0	0
Pasadena	500	1	1	0	0
Plano	1200	2	2	0	0
Richardson	1800	3	3	0	0
Robstown	3950	8	6	1	1
Sheldon	2000	5	5	0	0
Sherman	1100	3	3	0	0
Socorro	9700	14	11	3	0
South San Antonio	0	0	0	0	0
Spring Branch	1200	1	1	0	0
Temple	0	0	0	0	0
Texarkana	44	1	1	0	0
Victoria	701	1	1	0	0
Vidor	172	4	3	1	0
Waco	1932	6	5	1	0
Waxahachie	508	1	1	0	0
Weslaco	2600	8	5	3	0
Wichita Falls	943	3	3	0	0
Ysleta	0	0	0	0	0
TOTALS	54600	158	138	19	1
	Enroll	School	Elem	Inter	Secon

Table B-3
Texas YRE Districts Information

Aldine ISD
Dr. M.B. Donaldson
(713) 449-1011

14910 Aldine Westfield
Houston, TX 77032

YRE Contact
Dr. Kay Massey
(713) 449-1011

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 60-20 single track, school within a school

Elementary:	8	Enrollment:	1000
Intermediate:	-		-
Secondary:	-		-
Totals:	8		1000

Total number of schools in district: 41

Intersession: Traditional summer school activities and field trips

****

Alief ISD
Michelle Willhelm
(713) 498-8110 ext. 2000

P.O. Box 68
Alief, TX 77411

YRE Contact
Patty Stevens
(713) 498-8110 ext. 3460

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 45-15 single track, total school

Elementary:	2	Enrollment:	1900
Intermediate:	-		-
Secondary:	-		-
Totals:	2		1900

Total number of schools in district: 18

Intersession: No enrichment plans for 92-93

Allen ISD
Dr. Gene Davenport
(214) 727-0511

200 S. Cedar St.
Allen, TX 75002

YRE Contact
Dr. Gene Davenport
(214) 727-0511

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 60-20 single track, school within a school

Elementary:	5	Enrollment:	1400
Intermediate:	-		-
Secondary:	-		-
Totals:	5		1400

Total number of schools in district: 7

Intersession: Enrichment classes (Community ed.), Remediation (tutors)

****

Arlington ISD
Dr. Richard Berry
(817) 459-7300

1203 W. Pioneer Pkwy.
Arlington, TX 76013

YRE Contact
Dr. Nancy Bower
(817) 459-7300

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 45-15 single track, school within a school

Elementary:	2	Enrollment:	200
Intermediate:	-		-
Secondary:	-		-
Totals:	2		200

Total number of schools in district: 54

Intersession: Enrichment classes (Spanish, Math, Writing)

Austin ISD
Jim Hensley
(512) 499-1700

1111 W. 6th St.
Austin, TX 78703

YRE Contact
Lyn Ellisor
(512) 499-1700

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 60-20 single track, total school

Elementary:	1	Enrollment:	530
Intermediate:	-		-
Secondary:	-		-
Totals:	1		530

Total number of schools in district: 92

Intersession: Remedial (required, recommended, requested) 2 wk. prog.

****

Axtell ISD
William Crockett
(817) 863-5301

3501 N. 19th
Waco, TX 76708

YRE Contact
Gordon Tilley
(817) 756-2171

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 60-20 single track, total school

Elementary:	-	Enrollment:	-
Intermediate:	1		65
Secondary:	-		-
Totals:	1		65

Total number of schools in district: 5

Intersession: An MHMR facility, grades 4-11, work on psycho-social skills

Beaumont ISD
Jim Austin
(409) 899-9972

3395 Harrison
Beaumont, TX 77706

YRE Contact
Dr.Carswell
(409) 899-9972

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 30-10 single track, school within a school

Elementary:	2	Enrollment:	500
Intermediate:	-		-
Secondary:	-		-
Totals:	2		500

Total number of schools in district: 32

Intersession: Limited due to funding, 1 program in Oct. and 1 in Mar.

****

Brazosport ISD
Dr. Gerald E. Anderson
(409) 265-6181

P.O. Drawer Z
Freeport, TX 77541

YRE Contact
Patricia Davenport
(409) 265-6181

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 45-15 single track, school within a school

Elementary:	3	Enrollment:	400
Intermediate:	1		100
Secondary:	-		-
Totals:	4		500

Total number of schools in district: 16

Intersession: 1/2 Enrichment classes (Science, field trips), 1/2 Remediation

Brownsville ISD
Dr. Jack Ammons
(512) 548-8281

1900 Price Rd.
Brownsville, TX 78520

YRE Contact
Drue Munsch
(512) 548-8281

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 60-20 single track, total school

Elementary:	5	Enrollment:	2500
Intermediate:	-		-
Secondary:	-		-
Totals:	5		2500

Total number of schools in district: 39

Intersession: Enrichment (sports, fine arts), Remedial

****

Canyon
Mike King
(806) 655-1081

508 16th St.
Canyon, TX 79015

YRE Contact
Mike King
(806) 655-1081

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 45-15 single track, school within a school

Elementary:	1	Enrollment:	154
Intermediate:	-		-
Secondary:	-		-
Totals:	1		154

Total number of schools in district: 10

Intersession: One of three weeks used for enrichment and remediation

Conroe
Dr. Richard Griffin
(409) 756-7751

702 N. Thompson
Conroe, TX 77301

YRE Contact
Dr. Charles Loyd
(409) 367-2888

6020 Shadowbend Pl.
The Woodlands, TX 77381

YRE implementation date: 1989

Plan for 1992-93 school year: 30-10 single track, school within a school

Elementary:	6	Enrollment:	1000
Intermediate:	4		250
Secondary:	-		-
Totals:	10		1250

Total number of schools in district: 31

Intersession: Enrichment (field trips, cooking, foreign languages, computer)

****

Coolidge
James Smith
(817) 786-4822

P.O. Box 70
Coolidge, TX 76635

YRE Contact
Danny Baker
(817) 786-4822

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 45-15 single track, total school

Elementary:	1	Enrollment:	-	* Intermediate and secondary
Intermediate:	* 1		-	are combined
Secondary:	-		-	
Totals:	2		240	

Total number of schools in district: 1

Intersession: Remediation

Cypress Fairbanks
Richard Berry
(713) 897-4000

16320 Windfern Rd.
Houston, TX 77064

YRE Contact
Dr. Betty Willis
(713) 897-4118

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 60-20 multiple track (4), total school

Elementary:	2	Enrollment:	1600
Intermediate:	-		-
Secondary:	-		-
Totals:	2		1600

Total number of schools in district: 43

Intersession: Enrichment classes, Compensatory review courses

****

Dallas
Marvin Edwards
(214) 824-1620

3700 Ross Ave.
Dallas, TX 75204

YRE Contact
Lucy Longoria
(214) 302-2449

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 60-20 single track, 2: school within a school
1: total school

Elementary:	3	Enrollment:	1200
Intermediate:	-		-
Secondary:	-		-
Totals:	3		1200

Total number of schools in district: 189

Intersession: Remediation

Deer Park
Lynn Hale
(713) 930-4600

203 Ivy
Deer Park, TX 77536

YRE Contact
Norma Minter
(713) 930-4600

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 45-15 single track, school within a school

Elementary:	3	Enrollment:	350
Intermediate:	-		-
Secondary:	-		-
Totals:	3		350

Total number of schools in district: 12

Intersession: Remediation

****

Driscoll
Franklin White
(512) 387-7349

P.O. Box 238
Driscoll, TX 78351

YRE Contact
Linda Villarreal
(512) 387-7349

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 30-10 single track, total school

Elementary:	* 1	Enrollment:	210	* grades pre-k - 8
Intermediate:	-		-	
Secondary:	-		-	
Totals:	1		210	

Total number of schools in district: 1

Intersession: Enrichment (computer, social grace, sports), Remediation

Ector County
Dr. Gene Buinger
(915) 332-9151

P.O. Box 3912
Odessa, TX 79760

YRE Contact
Linda Simpson-Jones
(915) 332-2522

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 30-10 single track, total school

Elementary:	1	Enrollment:	531
Intermediate:	-		-
Secondary:	-		-
Totals:	1		531

Total number of schools in district: 42

Intersession: Enrichment (large array of programs), Accelerated classes

****

Fort Worth
Don Roberts
(817) 336-8311

3210 West Lancaster Avenue
Fort Worth, Texas 76017-3091

YRE Contact
Name
Phone #

YRE implementation date: Not planned for 1992-93 school year

Plan for 1992-93 school year:

Elementary:	Enrollment:	
Intermediate:		
Secondary:		
Totals:		

Total number of schools in district:

Intersession:

Friendswood
Dr. Gary Clay
(713) 482-1267

302 Laurel
Friendswood, TX 77546

YRE Contact
Dr. Gary Clay
(713) 482-1267

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 45-15 single track, school within a school

Elementary:	2	Enrollment:	470
Intermediate:	-		-
Secondary:	-		-
Totals:	2		470

Total number of schools in district: 4

Intersession: Enrichment (field trips, programs), Remediation

****

Harlandale
Yvonne Katz
(512) 921-4340

102 Genevieve
San Antonio, TX 78214-2997

YRE Contact
Susan Paloczy
(512) 921-4439

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 45-15 single track, 1 school within a school

8 total school

Elementary:	7	Enrollment:	2500	
Intermediate:	* 2		1050	* school within a school
Secondary:	-		-	
Totals:	9		3550	

Total number of schools in district: 25

Intersession: Enrichment (arts & crafts, field trips, speakers, sports)

Harlingen
Dr. James Smith
(512) 430-4400

1409 E. Harrison
Harlingen, TX 78550

YRE Contact
Lee Means
(512) 428-0112

2601 N. 7th
Harlingen, TX 78550

YRE implementation date: 1991

Plan for 1992-93 school year: 45-15 single track, school within a school

Elementary:	4	Enrollment:	1300
Intermediate:	-		-
Secondary:	-		-
Totals:	4		1300

Total number of schools in district: 21

Intersession: Remediation

****

Irving
J. Ed Singley
(214) 259-4575

901 O'Conner
Irving, TX 75061

YRE Contact
Ed Singley
(214) 259-4575

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 45-10 modified, school within a school

Elementary:	2	Enrollment:	700
Intermediate:	-		-
Secondary:	-		-
Totals:	2		700

Total number of schools in district: 17

Intersession: Enrichment / Remediation

La Porte
Richard Hays
(713) 471-0950 ext.2172

301 E. Fairmont
La Porte, TX 77517

YRE Contact
Dr. Rosemary Wilkinson
(713) 471-0950 ext.2460

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 30-10 modified, school within a school

Elementary:	3	Enrollment:	250
Intermediate:	-		-
Secondary:	-		-
Totals:	3		250

Total number of schools in district: 12

Intersession: None planned for 92-93 school year

****

Laureles / Santa Gertrudis
Dr. Billy Bowman
(512) 592-7582

P.O. Box 592, King Ranch
Kingsville, TX 78363

YRE Contact
Dr. Billy Bowman
(512) 592-7582

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 45-15 single track, total school

Elementary:	* 1	Enrollment:	100	* Grades pre-K - 8
Intermediate:	-		-	
Secondary:	-		-	
Totals:	1		100	

Total number of schools in district: 1

Intersession: Enrichment (life skills, sports, computers), Remediation

Longview
R. L. McMichael
(903) 753-0206

209 Westglenn Dr.
Longview, TX 75602

YRE Contact
Charles Newhouse
(903) 758-5781

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 30-10 single track, total school

Elementary:	1	Enrollment:	275
Intermediate:	-		-
Secondary:	-		-
Totals:	1		275

Total number of schools in district: 16

Intersession: Enrichment / Remediation

****

North East
Richard Middleton
(512) 657-8700

10333 Broadway
San Antonio, TX 78217

YRE Contact
Debbie Howard
(512) 657-8700

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 60-20 single track, total school

Elementary:	1	Enrollment:	475
Intermediate:	-		-
Secondary:	-		-
Totals:	1		475

Total number of schools in district: 47

Intersession: Enrichment (2 of 4 sessions), Remediation

Northside
Dr. Jack Jordan
(512) 647-2100

5900 Evers Rd.
San Antonio, TX 78238

YRE Contact
Linda Magee
(512) 647-2239

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 45-15 modified, school within a school

Elementary:	27	Enrollment:	5000
Intermediate:	-		-
Secondary:	-		-
Totals:	27		5000

Total number of schools in district: 54

Intersession: Enrichment (different at each school), Remediation

****

Pasadena
Larry Vaughn
(713) 920-6818

1515 Cherry Brook
Pasadena, TX 77502

YRE Contact
Kirk Lewis
(713) 920-6800

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 45-15 single track, school within a school

Elementary:	1	Enrollment:	500
Intermediate:	-		-
Secondary:	-		-
Totals:	1		500

Total number of schools in district: 44

Intersession: Enrichment / Remediation

Plano
Jim Surratt
(214)881-8193

1517 Ave. H
Plano, TX 75074

YRE Contact
Charles McCasland
(214) 618-6711

6526 Old Orchard
Plano, TX 75023

YRE implementation date: 1991

Plan for 1992-93 school year: 45-10 single track, total school

Elementary:	2	Enrollment:	1200
Intermediate:	-		-
Secondary:	-		-
Totals:	2		1200

Total number of schools in district: 40

Intersession: Enrichment (fine arts, field trips, sports, computers)

****

Richardson
Arzell Ball
(214) 301-3333 ext.3400

400 S. Greenville
Richardson, TX 75080

YRE Contact
Jerry Miller
(214) 301-3333 ext.3383

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 45-15 single track, school within a school

Elementary:	3	Enrollment:	1800
Intermediate:	-		-
Secondary:	-		-
Totals:	3		1800

Total number of schools in district: 51

Intersession: Enrichment (theme oriented-reading, math, science), Remediation

Robstown
Feliciano Gallegos III
(512) 387-9402

801 North First
Robstown, TX 78380

YRE Contact
Diana Silvas
(512) 387-9402

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 30-10 modified, total school

Elementary:	6	Enrollment:	1630
Intermediate:	1		1000
Secondary:	1		1320
Totals:	8		3950

Total number of schools in district: 8

Intersession: Enrichment (planning stages), Remediation

****

Sheldon
Max Nichter
(713) 459-7301

8540 C.E. King Pkwy.
Houston, TX 77044

YRE Contact
Stephanie Cravens
(713) 459-7301

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 30-10 modified, total school

Elementary:	5	Enrollment:	2000
Intermediate:	-		-
Secondary:	-		-
Totals:	5		2000

Total number of schools in district: 8

Intersession: Enrichment (none planned), Remediation

Sherman
Dr. Michael McDougal
(903) 892-9115

P.O. Box 1176
Sherman, TX 75091

YRE Contact
Allen Burton
(903) 892-9115

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 45-10 single track, total school

Elementary:	3	Enrollment:	1100
Intermediate:	-		-
Secondary:	-		-
Totals:	3		1100

Total number of schools in district: 10

Intersession: Enrichment (tailored to student's academic needs)

****

Socorro
Jerry Barber
(915) 858-0912

12300 Eastlake Dr.
El Paso, TX 79927

YRE Contact
Sue Shook
(800) 356-3179

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 60-20: dual track, 1-intermediate

Elementary:	11	Enrollment:	7000	single track, 4-elementary
Intermediate:	3		2700	
Secondary:	-		-	multiple track, 2-intermediate
Totals:	14		9700	7-elementary

Total number of schools in district: 16

Intersession: Enrichment (fine arts, sports, academics), Remediation

South San Antonio
Ron Dureon
(512) 924-8541

2515 Sioux
San Antonio, TX 78224

YRE Contact
Dr. Georgia Roessler
(512) 924-8541

Same

YRE implementation date: No program 1992 due to low enrollment for program

Plan for 1992-93 school year:

Elementary: Enrollment:
Intermediate:
Secondary:

Totals:

Total number of schools in district:

Intersession:

****

Spring Branch
Dr. Harold Guthrie
(713) 464-1511

955 Campbell Rd.
Houston, TX 77024

YRE Contact
Dr. David Calender
(713) 465-1784

2015 Ridgecrest
Houston, TX 77055-1299

YRE implementation date: 1991

Plan for 1992-93 school year: 60-20 multiple track, total school

Elementary:	1	Enrollment:	1200
Intermediate:	-		-
Secondary:	-		-
Totals:	1		1200

Total number of schools in district: 33

Intersession: Enrichment (field trips, foreign languages, academics), Remediation

Temple
Jack Reeves
(817) 778-6721

Address
Address

YRE Contact
Name
Phone #

Address
Address

YRE implementation date: No program for 1992

Plan for 1992-93 school year:

Elementary: Enrollment:
Intermediate:
Secondary:

Totals:

Total number of schools in district:

Intersession:

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Texarkana
Garry Collins
(903) 794-3651

4241 Summer Hill Rd.
Texarkana, TX 75503

YRE Contact
Betty Colley
(903) 794-3651

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 60-20 single track, school within a school

Elementary:	* 1	Enrollment:	44	* Kindergarten only
Intermediate:	-		-	
Secondary:	-		-	
Totals:	1		44	

Total number of schools in district: 11

Intersession: Accelerated programs

Victoria
Robert Brezina
(512) 576-3131

P.O. Box 1759
Victoria, TX 77901

YRE Contact
Dr. Jan Jacobs
(512) 576-3131

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 45-15 single track, total school

Elementary:	1	Enrollment:	701
Intermediate:	-		-
Secondary:	-		-
Totals:	1		701

Total number of schools in district: 21

Intersession: Enrichment (math, science), Remediation

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Vidor
Tom Mauer
(409) 769-2143

120 East Bolivar
Vidor, TX 77662

YRE Contact
Emily Weatherly
(409) 769-2143

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 30-10 single track, school within a school

Elementary:	3	Enrollment:	150
Intermediate:	1		22
Secondary:	-		-
Totals:	4		172

Total number of schools in district: 6

Intersession: Enrichment (field trips), Remediation

Waco
Dr. Fred Zachary
(817) 752-8341

P.O. Box 27
Waco, TX 76703

YRE Contact
Jim Elsberry
(817) 752-8341

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 60-20 single track

Elementary:	5	Enrollment:	1860	* 4 total school, elementary
Intermediate:	1		72	* 2 school within a school,
Secondary:	-		-	1-elementary
				1-intermediate
Totals:	6		1932	

Total number of schools in district: 25

Intersession: Enrichment (physical activity), Child care

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Waxahachie
David Mongomery
(214) 923-4631

411 Gibson St.
Waxahachie, TX 75165

YRE Contact
Jane Westberry
(214) 923-4631

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 45-10 single track, total school

Elementary:	1	Enrollment:	508
Intermediate:	-		-
Secondary:	-		-
Totals:	1		508

Total number of schools in district: 8

Intersession: Enrichment (working with YMCA), Remediation

Weslaco
Dr. Roy Benavidez
(512) 968-1515

P.O. Box 266
Weslaco, TX 78596

YRE Contact
Tonie Fuentes
(512) 968-1515

Same

YRE implementation date: 1991

Plan for 1992-93 school year: 60-20 multiple track, total school

Elementary:	5	Enrollment:	2000	* 2 grades 4-5
Intermediate:	* 3		600	* 1 grades 6-8
Secondary:	-		-	
Totals:	8		2600	

Total number of schools in district: 11

Intersession: Enrichment (computer, dramatics, language) Accelerated classes

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Wichita Falls
Dr. Leslie Carnine
(817) 720-3232

1104 Broad
Wichita Falls, TX 76301

YRE Contact
Tom McGough
(817) 720-3232

Same

YRE implementation date: 1992

Plan for 1992-93 school year: 30-10 modified single track, total school

Elementary:	3	Enrollment:	943
Intermediate:	-		-
Secondary:	-		-
Totals:	3		943

Total number of schools in district: 28

Intersession: Enrichment classes, Remediation

Ysleta
Mauro Reyna
(915) 591-9160

9600 Sims Dr.
El Paso, TX 79925-7525

YRE Contact
Louis Villalobos
(915) 591-9160

Same

YRE implementation date: 1991

Plan for 1992-93 school year: Extended calendar ** Pre-K center only

Elementary: Enrollment:
Intermediate:
Secondary:

Totals:

Total number of schools in district:

Intersession:

APPENDIX C
RFP FOR A STUDY OF LEARNING RETENTION

DRAFT
REQUEST FOR PROPOSALS

The Educational Economic Policy Center (EEPC) invites proposals for an investigation of the academic impact of Year-Round Education (YRE) programs in Texas schools.

Background: Year-round schools seek to provide a more continuous teaching/learning pattern for students. Under YRE, the school calendar is changed by altering the frequency and length of vacation breaks, commonly termed **intersessions**. Thus, the conventional nine-months of school and three-months of summer vacation are distributed across the year in smaller increments. YRE schools may be organized either as single-track or multitrack programs. Under single-track programs, all students are in school or on vacation at the same time. In multitrack programs, students are divided into equal groups, with the terms for each group being staggered so that at any given time, some students are in school and some are on vacation.

Across the nation, in 1991, there were an estimated 1,668 schools in 23 states engaged in some form of YRE, with the number of such schools having grown 83 percent between 1990-91 and 1991-92. Most of his increase has been in the number of single-track programs, which now account for nearly half of all YRE programs.

In the 1992-93 school year, forty-one Texas school districts are operating some form of YRE, only three of which are multitrack programs. Twenty-two of the twenty-six districts operating YRE programs in 1991-92 are continuing those programs. The 158 participating YRE schools enroll approximately 54,600 students, mostly at the elementary level. Districts report that the primary motivation for moving to YRE is to improve student academic performance, particularly for disadvantaged youth. [A list of YRE school districts in Texas is included as an appendix to this RFP.]

Unfortunately, formal evaluations of academic achievement under various forms of YRE provide an insufficient foundation for judging the effectiveness of such programs. Not only have relatively few studies been made, but their research designs have often been flawed.

For example, there is a considerable body of opinion and some research evidence that the three-month summer break results in a loss of learning retention, particularly for disadvantaged youth. However, as of yet there is no confirmation from empirical research that student learning retention increases under YRE programs.

Analyses of student achievement in multitrack YRE programs find, with one notable exception, that student achievement is at least equal to that attained in traditional calendar programs. Although limited to a single study, research suggests that student achievement under single-track YRE programs is equal to or slightly better than under the conventional nine-month calendar.

Research Objectives: The Educational Economic Policy Center seeks to fund an empirical study to assess the academic impact of YRE programs in Texas. The proposed research would have two related objectives:

1. To compare learning retention of YRE students with that of students going to school under the traditional calendar.

The basic issue here is whether shorter and more frequent vacation breaks improve learning retention. This research also could be used to compare learning retention by different types of students, i.e., disadvantaged vis-a-vis non-disadvantaged, in both YRE and traditional calendar programs.

2. To compare the academic performance of YRE students with that of students going to school under the traditional calendar.

   The basic issue here is whether YRE programs enhance academic performance. To address this issue, a longitudinal study is suggested.

Research Design:

At least three districts operating both traditional and year-round calendar programs would be selected for study. Learning retention in each type of school would be evaluated using standardized tests administered in September 1993, May 1994, and September 1994. Evaluations would be developed comparing learning retention by all students in each type of program, by disadvantaged students vis-a-vis their peers in each type of program.

Academic performance of the same students would be followed over three consecutive school years. At a minimum, academic performance would be evaluated on the basis of state-mandated tests. To the extent feasible, these tests would be augmented by other types of tests or evaluations (e.g., the tests of learning retention given in years one and two could be extended to years two and three).

Almost all Texas districts operating YRE programs have expressed an interest in receiving assistance in evaluating their YRE programs. In selecting districts, care should be taken to ensure that there are no major differences in curriculum, in the make-up of the student body, or in other factors that might influence achievement among the schools included in the study. [For example, if students going to school under the traditional program participate in summer school, this significantly weakens the comparative results of tests of learning retention.]

The proposals should identify the districts which will be used in the evaluation study and contain a letter, signed by the superintendent, expressing the district's willingness to participate in the study.

Timing: The study will be accomplished in two phases.

Phase One will begin on September 1, 1993 and extend to December 31, 1994. It will include the study of comparative learning retention as well as an analysis of comparative academic performance for the first school-year (1993-1994).

Phase Two will begin on January 1, 1994 and extend to August 31, 1996. It will include analysis of comparative academic performance for two school years (1994-1995 and 1995-1996)

Reports: Separate reports will be prepared for Phase One and Phase Two of the study. Formal acceptance of the Phase One report will be a condition for commencement of Phase Two.

Funding: The maximum amount of funds available is $60,000 for Phase One and $40,000 for Phase Two, to include all professional costs, travel, supplies, etc. **There will be no allowance for the reimbursement of indirect fees**. The purchase of capital equipment with these funds is prohibited.

Disbursement of funds for Phase 2 of the study will be conditioned on formal acceptance by the EEPC of the Phase One report.

Proposals must be limited to no more than 15 pages and must be received in the EEPC office no later than 5:00 p.m. (90 days after the date of the RFP).

Questions should be directed to David Dunn at (512) 471-4962. Proposals should be submitted to the:

Educational Economic Policy Center
SRH 3.310
The University of Texas at Austin
Austin, Texas 78712

Evaluation of Proposals and Selection Criteria:

In evaluating proposals, the following selection criteria will be applied. The maximum total point score for an application is 100 points.

(a) **Probability of Achieving Proposed Outcomes: Program and Project Design (40 points).** The application will be reviewed to determine to what degree:

1. The objectives of the research are clearly stated.
2. The project design and methodology are capable of fulfilling the requirements for meeting the stated objectives.
3. The measurement methodology and proposed analysis are sound and meet commonly accepted statistical standards.
4. The human subjects are sufficiently protected.

(b) **Probability of Achieving Proposed Outcomes: Personnel (20 points).** The application will be reviewed to determine to what degree the Principal Investigator and other key personnel have adequate training or experience and demonstrate appropriate potential to conduct the proposed research.

(c) **Probability of Achieving Proposed Outcomes: Evaluation Plan (20 points).** The application will be reviewed to determine to what degree:

1. The evaluation methods are likely to produce data that are statistically valid.
2. The evaluation results are likely to have clear implications for further research or direct application.

(d) **Program Management (20 points).** The application will be reviewed to determine to what degree:

1. There is an effective plan of operation that ensures efficient administration of the project.
2. The means to disseminate and promote use by others are defined.
3. The budget for the project is adequate to support the proposed activities.